

COMPUTING RESEARCH NEWS



Computing Research Association
Uniting Industry, Academia and Government to
Advance Computing Research and Change the World.

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CRN At-A-Glance

CRA-Industry Virtual Roundtable on Best Practices on Using the Cloud for Computing Research – September 15

The purpose of this virtual roundtable is to discuss best practices on using the cloud for computing research and the resulting synergistic opportunities across industry, academia, and government.

see page 2 for full article

Nominations Open for 2022 CRA Award for Outstanding Undergraduate Researchers

CRA is pleased to announce the annual CRA Award for **Outstanding Undergraduate Researchers**, which recognizes undergraduate students in North American colleges and universities who show outstanding research potential in an area of computing research. The award is a wonderful way to recognize your best student researchers and your department.

see page 3 for full article

CRA Executive Director Andrew Bernat Retires After Nearly Two Decades of Leadership

After nearly 20 years at the helm of the Computing Research Association, Executive Director Andrew Bernat has retired from his position, marking the close of his incredible career that has spanned more than 40 years.

CRA would like to thank Bernat for all he has done for the organization and the computing field. In recognition of his many years of service, CRA staff organized a Hawaiian luau themed farewell party and surprised him at a virtual staff meeting with a custom Zoom background in his honor. He will be greatly missed!

see page 15 for full article

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CRA-Industry Virtual Roundtable on Best Practices on Using the Cloud for Computing Research - September 15



The CRA-Industry Committee invites you to attend the Virtual Roundtable on Best Practices on using the Cloud for Computing Research.

Background:

A major focus in computing research across industry, academia, and government is to advance the frontiers of computing by experimenting with leading-edge compute platforms. This was initially at odds with early instances of cloud/warehouse computing that focused on deploying commodity rather than state-of-the-art systems. However, cloud computing platforms have advanced significantly during the last two decades to the point where there are now many notable examples of their use in research. Further, the cloud's "pay as you go" model has proved attractive for research related to machine learning and data analytics that benefit from elastic provisioning of resources. It is noteworthy that NSF has extended its CloudBank portal with a CloudBank Catalog with links to commercial cloud services that can be paid from NSF grants. Hence, increased use of the cloud for computing research could offer new revenue opportunities to cloud providers, in addition to joint research across industry and academia. There will also likely be a crossover from the use of cloud computing for research to its use in teaching, thereby making future generations of computing professionals more accustomed to cloud platforms.

The purpose of this virtual roundtable is to discuss best practices on using the cloud for computing research and the resulting synergistic opportunities across industry, academia, and government. Some of the discussion topics will include:

- Use of cloud computing to broaden the set of institutions that can gain access to large-scale resources for computing research
- Fostering research collaborations across industry, academia, and government (also enabled by data sharing and open-source software)
- Preparing students to be consumers of cloud computing in their future careers
- Enabling computing researchers to be creators and early adopters of leading-edge cloud technologies, while looking under the hood and customizing the systems being used
- Demystifying and capping costs incurred when using the cloud for research.

Intended audience: Computing researchers in academia and industry, cloud providers, research sponsors.

When

September 15, 2021

3:00 PM - 4:15 PM Eastern Daylight Time
2:00 PM - 3:15 PM Central Daylight Time
1:00 PM - 2:15 PM Mountain Daylight Time
12:00 PM - 1:15 PM Pacific Daylight Time

Where

Virtual - *Zoom link will be provided closer to the event date.*

More Information

[View Event Summary](#)



Registration

Please let us know whether or not you plan to attend by registering [here](#) by **September 14**. If you know of anyone who may be interested in attending this roundtable discussion, please feel free to provide them with this registration link: <https://cvent.me/9KbWAG>

Moderators

Fatma Ozcan, Principal Software Engineer, Google

Vivek Sarkar, Professor and Chair, School of Computer Science, Georgia Institute of Technology

Panelists

David Culler, Distinguished Software Engineer, Google

Ed Lazowska, Professor, University of Washington

Margaret Martonosi, CISE AD, National Science Foundation

Giovanni Pacifici, Vice President of Cloud, IBM Research

Raghu Ramakrishnan, CTO for Data, Microsoft

You can learn more about CRA-Industry by visiting our [web page](#) and/or signing up for our [mailing list](#).

Nominations Open for 2022 CRA Award for Outstanding Undergraduate Researchers



CRA-E

Computing Research Association
Education

The Computing Research Association (CRA) is pleased to announce the annual CRA Award for **Outstanding Undergraduate Researchers**, which recognizes undergraduate students in North American colleges and universities who show outstanding research potential in an area of computing research. The award is a wonderful way to recognize your best student researchers and your department.

Eligible nominees must be enrolled as undergraduates in a North American college or university in Fall 2021. PhD-granting departments may nominate up to four students and other departments may nominate up to two students.

Up to four CRA Outstanding Undergraduate Research Awards will be made. Each award recipient will receive financial assistance of up to \$1500 to attend a research conference of their choice. Additional nominees will be designated as runners-up, finalists, and honorable mentions. The award recipients, runners-up, finalists, and honorable mentions will be announced by e-mail in mid-December, will receive certificates of their awards, and will be recognized on CRA's website.

Everything you need to submit a nomination for the CRA Outstanding Undergraduate Researchers Award, including detailed instructions and the nomination form, is available at: <http://cra.org/crae/awards/cra-outstanding-undergraduate-researchers/>.

Questions and inquiries about the awards should be sent to: undergradawards@cra.org. **The deadline for nominations is Friday, October 15, 2021, at 9 PM ET. The nominations package will need to be submitted as one PDF file in the order specified in the instructions.**

Microsoft Research and **Mitsubishi Electric Research Labs** (MERL) sponsor the CRA Outstanding Undergraduate Researchers Award Program in alternate years. The 2022 award is being sponsored by Microsoft Research. This award is managed by the **CRA Education Committee**.

Faculty members nominating a student for the CRA award are encouraged to talk to the student about the NSF Graduate Research Fellowship Program (GRFP). The required nomination materials are similar, and some can be used for both the CRA-E award and the NSF GRFP application. The NSF Graduate Research Fellowship Program recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based Master's and doctoral degrees at accredited United States institutions. See <https://www.nsfgrfp.org/> for information for applicants, letter writers, how to sign up as a panelist, and the **program solicitation**. Applications for GRFs are due the week after the CRA award nominations, on October 19, 2021.

Please share this document with your colleagues!



Computing Research for the Climate Crisis

By CCC Staff

Last month the **Intergovernmental Panel on Climate Change** (IPCC), which is the United Nations body for assessing the science related to climate change, released their *Climate Change 2021 - The Physical Science Basis* Report.

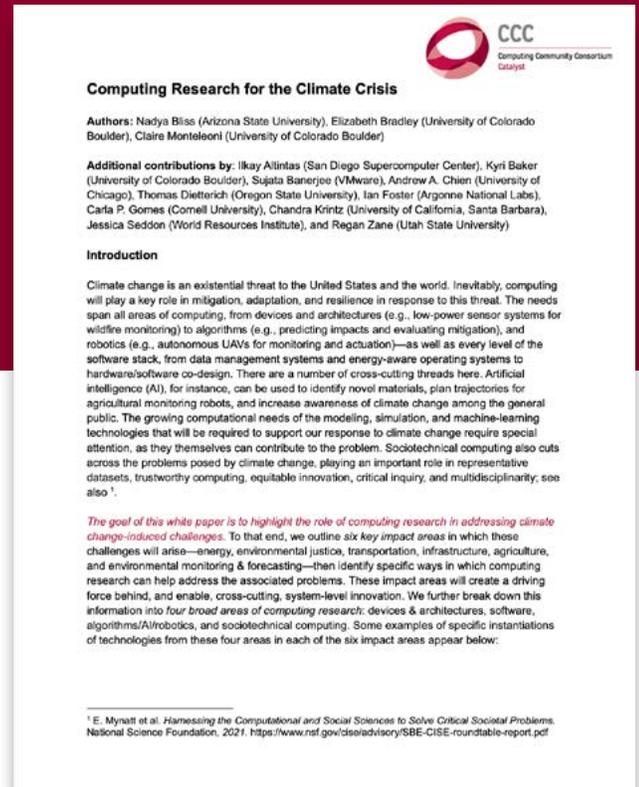
The report is sobering. We know that human activity is changing the climate in unprecedented and sometimes irreversible ways, but this recent report warns of increasingly extreme heatwaves, droughts and flooding, and a key temperature limit being broken in just over a decade. It shows how catastrophic the outlook will be if we don't act now.

The **Computing Community Consortium** (CCC) has released a new whitepaper on *Computing Research for the Climate Crisis*, coauthored by Nadya Bliss (Arizona State University), Elizabeth Bradley (University of Colorado Boulder), and Claire Monteleoni (University of Colorado Boulder), to highlight the role of computing research in addressing climate change-induced challenges.

Six key areas of impact in which these challenges will arise—energy, environmental justice, transportation, infrastructure, agriculture, and environmental monitoring & forecasting—are outlined, and then specific ways in which computing research can help address them are identified. They then are further broken down into four broad areas of computing research: devices & architectures, software, algorithms/AI/robotics, and sociotechnical computing. Some examples of specific instantiations of technologies from these four areas in each of the six impact areas appear below:

Energy

- **Hardware:** Sensors and sensor networks for monitoring power generation and consumption; energy-harvesting devices
- **Software:** Managing, cleaning, fusing, and distributing heterogeneous data from multiple sources
- **AI/Robotics/Algorithms:** Planning, optimization, and decision support for production, distribution, and consumption of energy; AI-enabled materials science for renewables
- **Sociotechnical:** Appropriate cost functions for optimization; communicating about decisions



Environmental justice

- **Software:** Rich data sets and models that properly capture and expose equity aspects, hidden biases, and economic factors
- **AI/Robotics/Algorithms:** Modeling and decision-support strategies that leverage those data and manage cascading risks
- **Sociotechnical:** Critical inquiry methodology, question- (vs. solution-) driven science, and stakeholder engagement

Transportation

- **Hardware:** Sensors and sensor networks for monitoring salient variables (traffic, goods, people, pollution, energy availability & needs, etc.)
- **Software:** Managing and disseminating data; creating effective models that couple those variables with economic forces and constraints



Climate Crisis (*continued*)

- **AI/Robotics/Algorithms:** Spatiotemporal planning strategies to optimize the routing of flows in the network
- **Sociotechnical:** Helping people understand how and why to act in this new system

Infrastructure

- **Hardware:** Sensors and sensor networks for monitoring roads, bridges, communication networks, etc.
- **Software:** Smart database management for lifetime of materials
- **AI/Robotics/Algorithms:** Optimization and decision support of flows of energy, goods, water, vehicles, people, power, etc.; AI-enabled materials science for green materials
- **Sociotechnical:** Equitable distribution and access to new technology (e.g. renewable energy, grid resiliency, power); stakeholder engagement

Agriculture

- **Hardware:** Sensors and sensor networks for monitoring water, temperature, crop growth, etc.
- **Software:** Systems for deployment and control of autonomous vehicles (e.g., UAVs)
- **AI/Robotics/Algorithms:** Algorithms that leverage rich sensor data, together with real-time information about economic factors and transportation networks, for planning and risk assessment
- **Sociotechnical:** Stakeholder engagement

Environmental monitoring and forecasting

- **Hardware:** Sensors and sensor networks for monitoring temperature, CO2 levels, ice coverage, etc.
- **Software:** Detection and diagnosis of sensor failure; managing assimilation of data into models
- **AI/Robotics:** Uncertainty quantification; system-level, risk-sensitive modeling, planning, and optimization strategies for climate variables, at all scales
- **Sociotechnical:** Ensuring saliency, credibility, and legitimacy in decision support systems

The climate crisis introduces new grand challenges for computing research. Solutions to these problems will require advances in all areas of computing, carried out by interdisciplinary teams that bring together computing researchers with colleagues from the social, behavioral, and economic sciences—as well as the physical sciences and engineering—and coordination between sectors. This type of deep, coordinated interdisciplinary approach will not only facilitate transition of novel research (via stakeholder engagement, for example), but more importantly, it will help ensure that innovations are distributed equitably and take into account vulnerable communities.

See [the full report](#) to learn more.

Melanie Mitchell on the Importance of Training AI to Recognize Analogies



CCC

Computing Community Consortium
Catalyst

By CCC Staff

Melanie Mitchell, **Computing Community Consortium** (CCC) Council member and Professor at the **Santa Fe Institute**, was recently featured in a Scientific American article, '**The Computer Scientist Training AI to Think with Analogies**'. The article focused on explaining the importance of getting Artificial Intelligence (AI) to recognize and use analogies and included **an interview on the topic from Quanta**.

If and how AI can reach the same level of intelligence and independence as humans is an interdisciplinary problem that has plagued the field for many decades. Mitchell believes the key to success is getting these machines to think with analogies. The greatest advances in AI have focused on training to succeed in specific tasks. In order to achieve general intelligence, AI needs to be able to take what it has learned from a specific task and apply it to another situation with a different goal. Mitchell suggests this is where thinking in terms of analogies becomes vital.

Mitchell began pursuing this idea in graduate school where she worked with Douglas Hofstadter on **Copycat**, a computer program

designed to “discover insightful analogies, and to do so in a psychologically realistic way.” Hofstadter and Mitchell believed understanding the cognitive processes that allow humans to think abstractly and make connections between similar ideas and experiences would unlock the ability for AI to apply what it has learned to other scenarios and tasks. The *Quanta* interview with Mitchell dives deeper into this idea, analyzing why this concept has been left largely unexplored, what work was done in this area, and roadblocks preventing the application of analogies to AI from becoming a reality.

A key step to moving forward in this area of research is emphasizing the importance of analogies to cognitive learning. Many scientists in this area have been and still are focused on deep learning techniques and the idea of training through tons of examples. The notion of training AI has to move away from thinking in specific examples and instead think generally and abstractly.

Mitchell has continued to explore major questions leading to human-thinking AI in her work at the Santa Fe Institute where



she leads SFI's **Foundations of Intelligence in Natural and Artificial Systems** project. They will be holding a series of workshops this year exploring how biological evolution, collective behavior and the physical body all contribute to intelligence.

You can read the full Quanta interview **here** and the Scientific American feature **here**.

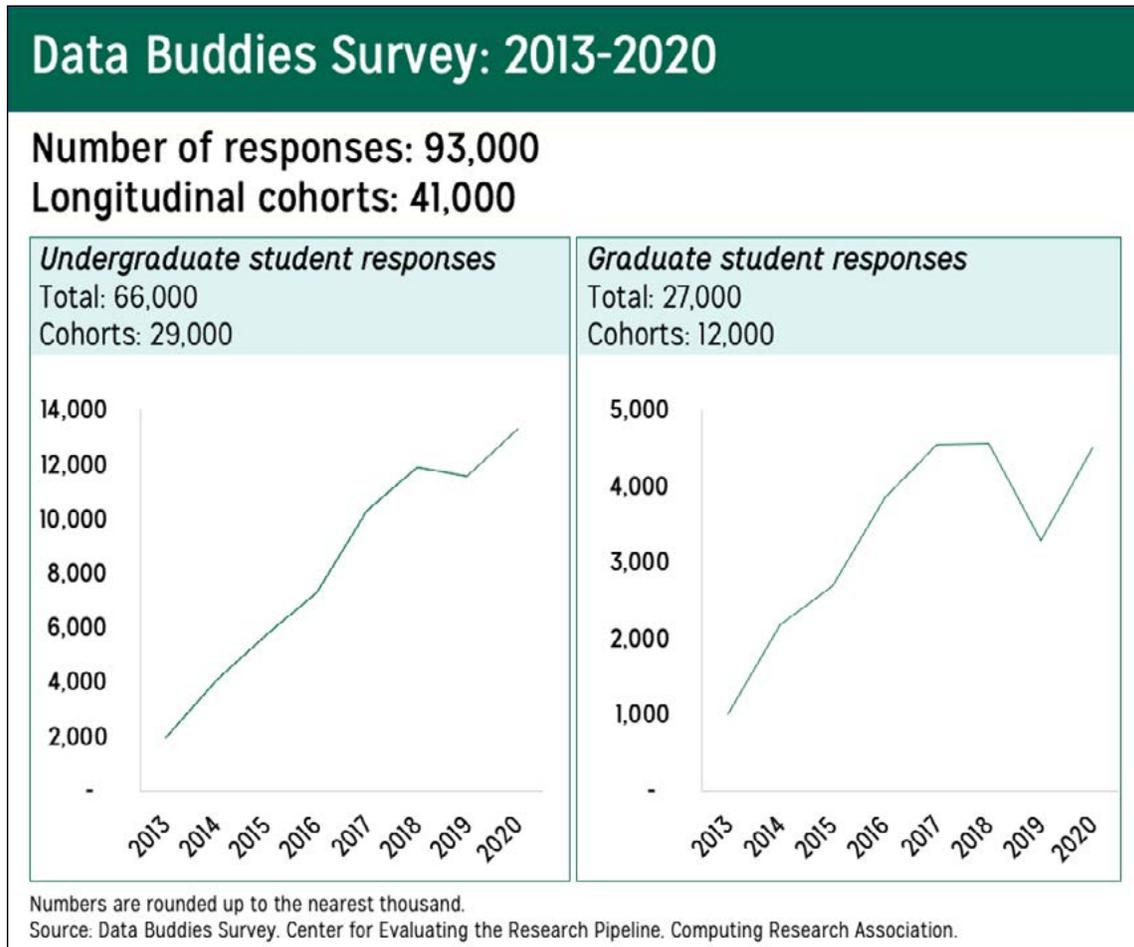
Since 2013, Data Buddies Survey Has Collected 93,000 Responses from Undergraduate and Graduate Students in Computing



CERP

Computing Research Association
Evaluation

By CERP Staff



The CRA Data Buddies Survey (DBS), managed by the CRA Center for Evaluating the Research Pipeline (CERP), is a rich data source providing important information to the community on the state of computing in higher education from the students' perspective. Undergraduate and graduate students in computing-related degree programs across the United States and Canada have been recruited by participating Data Buddy departments since 2013, after approximately two years of piloting. In 2014, CERP added a longitudinal component to its data collection efforts and started recruiting cohorts of students who take the DBS to follow up with them on an annual basis [1]. As students graduate from their degree programs and enter the workforce, those survey respondents filter into a new pathway designed specifically for alumni and professionals.

This graphic provides an overview of the amount of data collected since 2013 when CERP was established to run the Data Buddies Project. From 2013 to 2020, CERP has collected approximately 93,000 total responses between both undergraduates and graduates, and 41,000 (44%) of these respondents are part of CERP's longitudinal cohorts [2] [3].

For the 2020 survey cycle specifically, CERP collected 13,320 responses from undergraduate students and 4,505 responses from graduate students. Of those responses, about 46% of undergraduates and 55% of the graduate student responses were part of CERP's longitudinal cohorts.

Have you thought about joining the project? [Participating departments](#) gain insight into their students' experiences in



Data Buddies Survey *(continued)*

their computing degree programs at their institutions compared to students at similar institutions. Departments are also able to track their departments' progress over time through customized department reports that they receive every spring. Visit <https://cra.org/cerp/data-buddies/> to find out more about the Data Buddies Project, view a [sample department report](#), and sign up to become a [data buddy!](#)

For the 2021 survey cycle, departments should [submit a volunteer form](#) by November 1, 2021 for the CERP team to have time to engage with the university Institutional Review Board (IRB), ensuring the project can move forward prior to the close of the survey.

Notes:

- [1] More details on the history of CERP and the Data Buddies Project can be found [here](#).
- [2] Numbers rounded to the nearest thousand.
- [3] Respondents included in the "longitudinal cohort" numbers include undergraduate and graduate students who volunteered to complete future surveys directly from the CRA.

This analysis is brought to you by the CRA's Center for Evaluating the Research Pipeline (CERP). CERP provides social science research and comparative evaluation for the computing community. Subscribe to the CERP newsletter [here](#). Volunteer for Data Buddies by signing up [here](#).

The Data Buddies Project is currently supported through National Science Foundation (NSF) awards CNS-1840724, CNS-2036717, DUE-1821136, sub-awards and contracts, and direct CRA contributions. Previous NSF awards that supported DBS include CNS-1246649 and DUE-1431112. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Expanding the Pipeline: Celebrating 10 years of the CRA Data Buddies Project



CERP
Computing Research Association
Evaluation



CRA-WP
Computing Research Association
Widening Participation

By Heather Wright, Associate Director of CERP

Introduction

In 2009, an idea sparked that begged the question: what if there was a way to collect comparative data in service of rigorous program evaluation? That's the question the Computing Research Association's Committee on the Status of Women in Computing Research (CRA-W; now known as the CRA Committee on Widening Participation in Computing Research CRA-WP) and the Coalition to Diversity Computing (CDC) asked that ultimately started what is now known as the CRA [Data Buddies Project](#). The Data Buddies Project has been running strong since 2010, and the conclusion of the fall 2020 survey cycle marked the 10th year of the Data Buddies Survey: the flagship initiative of the project. This article dives into some of the history of the Data Buddies Project and the CRA Center for Evaluating the Research Pipeline (CERP) while also highlighting the project over the years. The article concludes with a look into how the project operates today.

Is it all just history?

In 2009, the Data Buddies Project was just an idea—one that was far reaching and would require skilled researchers to manage. The goal was to collect survey data from undergraduate and graduate students in computer science degree programs, which would then turn into a comparison group for CRA-W/CDC program participants. The outcome would be rigorous program evaluation that compared participants to a national sample of non-participants.

CRA-W/CDC leadership and CRA researchers worked together to design a pilot survey

they called the Data Buddies Survey (DBS). They designed the survey to ask questions related to students' sense of belonging to computing, their skillsets and interest in research, and their academic and professional aspirations. Academic departments across the United States would distribute the survey to their students during the fall and spring semesters: the fall semester to survey continuing students and the spring for graduating students.

After pilot testing the survey in the spring of 2010 with a small group of ten computing departments, DBS started strong with 54 academic partners by the spring of 2011 who agreed to work with the project for the 2011 and 2012 years. Although more than half of those departments were within doctoral degree granting institutions (52%), 28% of institutions were master's granting and 20% were bachelor's granting. In exchange for their time and recruitment efforts, these original 54 institutions were offered stipends and a free report for the department. The department report included summary tables that showed a given DBS school's aggregate student responses alongside four comparison groups: top doctoral granting institutions, all other doctoral institutions, master's institutions, and bachelor's institutions.

Although researchers at the CRA were able to run the survey from 2010 to 2012, it soon became clear that the Data Buddies Project would require a full-time staff to manage the survey. With a new Broadening Participation in Computing (BPC) Alliance award (CNS-1246649) in hand, the CRA-W/

CDC Alliance used some of those funds to start a new research and evaluation center called the CRA Center for Evaluating the Research Pipeline (CERP). By the fall of 2013, CERP was fully staffed with researchers with social science backgrounds who could take full responsibility of the survey, its data, and resulting reporting. The CERP team refined components of DBS, recruited more schools to participate, and improved the department report in ways that further helped participating departments understand their students' responses.

With the help of the CRA-W/CDC Alliance funding, CERP developed a sustainable infrastructure for DBS that would enable the project to continue for years to come. Part of that sustainable infrastructure included submitting proposals to NSF to sustainably support the project. In 2014, CERP was awarded an NSF grant (DUE-1431112) to begin collecting longitudinal data alongside the foundational data collection procedures established in 2011. CERP has been sustaining the Data Buddies Project with additional funds including a large NSF IUSE grant (DUE-1821136) received in 2018.

DBS over the years

As one might expect, DBS has grown in many ways since 2010. This section showcases the departments and student responses that have contributed to the overall success of the Data Buddies Project.

DBS Partner Institutions

As mentioned earlier, the Data Buddies Project began with only ten institutions in 2010. Over a ten-year period (2010-2020), the number of participating institutions grew 1,350%! Out of the 234 computing



Expanding the Pipeline *(continued)*

departments that have been part of the project across the years, two stood the test of time and are currently the longest-standing partner institutions of Data Buddies: Columbia University and Duke University.

In Table 1 below, we showcase our long-standing partner institutions who joined in either 2010 or 2011 and have consistently participated in the project over the years except one or two years. In Figure 1, we also show the total number of DBS partner institutions from 2010-2020. Starting in 2015, CERP began highlighting “Elite” DBS partners who received a 20% or greater response rate. All active and elite DBS partners are included in Figure 1.

Spring DBS for graduating students

When DBS was first launched in 2010, it began as a spring semester survey for graduating computer science majors. A total of 386 senior undergraduates completed the inaugural survey across the ten partner institutions. From that point, both undergraduate and graduate students finishing their computing degree programs completed the spring DBS survey, which primarily collected data about their academic and professional aspirations.

To reduce the burden on departments distributing two surveys per year, CERP decided to retire the graduating student survey after the 2019 data collection wave. Unique measures collected from senior students were folded into the fall survey so that CERP could continue to learn about the career pathways of computing students in the field. Figure 2 below

Table 1. Long-standing DBS partner institutions.

Institution	Department	Year Joined
Columbia University*	Computer Science	2010
Duke University*	Computer Science	2010
Tufts University	Computer Science	2010
Virginia Tech	Computer Science	2010
Colorado School of Mines	Electrical Engineering & Computer Science	2011
Harvey Mudd College	Computer Science	2011
Kean University	Computer Science	2011
Miami University-Oxford	Computer Science & Software Engineering	2011
New Mexico State University-Main Campus	Computer Science	2011
Radford University	Department of Information Technology	2011
Rochester Institute of Technology	Computer Science	2011
SUNY College-Plattsburgh	Computer Science	2011
Texas Southern University	Computer Science	2011
University of California-San Diego	Computer Science & Engineering	2011
University of Colorado-Boulder	Computer Science	2011
University of Hawaii-Hilo	Computer Science & Engineering	2011
University of Illinois-Springfield	Computer Science	2011
University of Maryland-Baltimore County	Information Systems	2011
University of Massachusetts-Amherst	Information & Computer Sciences	2011
University of Nebraska-Kearney	Computer Science & Information Technology	2011
University of Puget Sound	Mathematics & Computer Science	2011
Washington and Lee University	Computer Science	2011
Western Oregon University	Computer Science	2011

Note: (*) Longest-standing DBS Partner Institutions that joined in 2010 and never missed a year of data collection.



Expanding the Pipeline *(continued)*

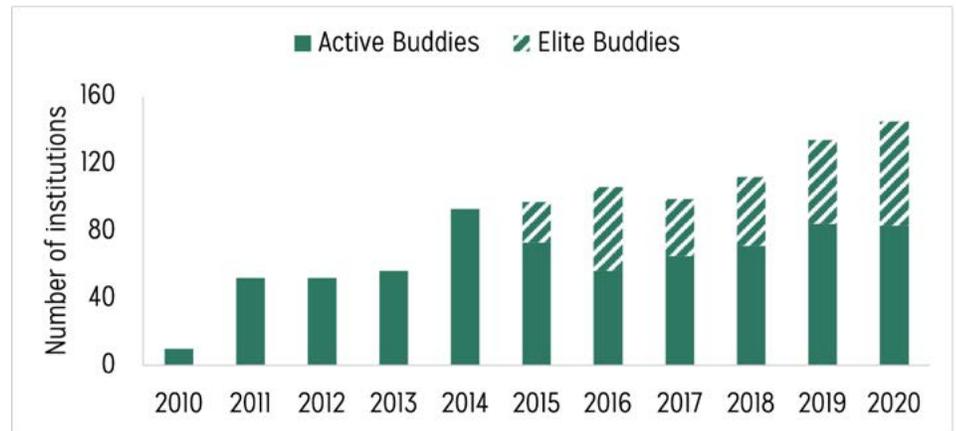
displays the responses collected through the spring survey from 2010-2019.

Fall DBS

Now considered the flagship survey, the fall Data Buddies Survey has been actively collecting data from undergraduates and graduate students since 2011. Over time, the survey has grown to accommodate different types of students and even non-students, including alumni and professionals. One major change to broaden the survey was implemented in 2018 so that the measures included in the survey could be completed by both computing majors and non-majors – an important distinction that enabled departments to learn about the experiences of non-majors completing computing-related coursework. Although that option was somewhat available in prior years, the specific wording of many of the survey questions were difficult to complete by non-majors.

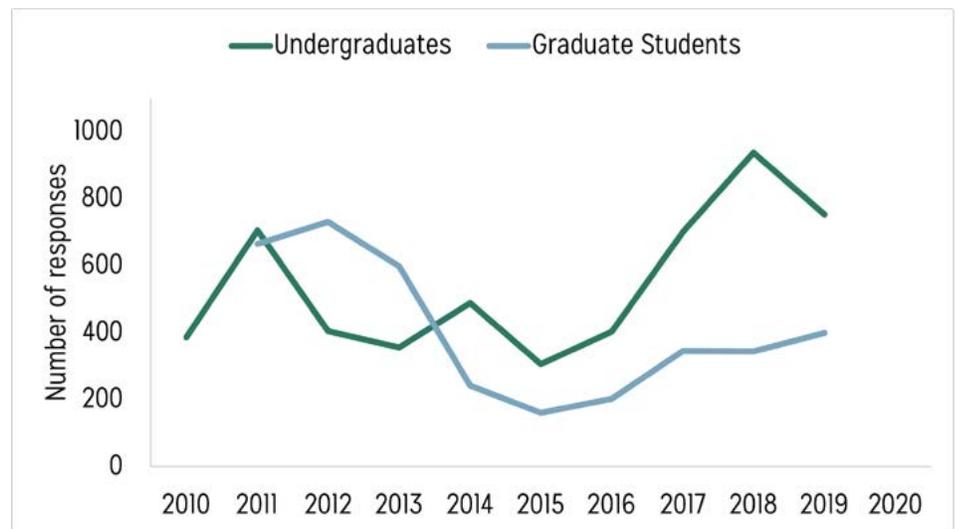
In 2019, another set of major changes were implemented to the surveys. Students in non-degree pathways such as certificate programs were provided a specialized pathway through the survey; in prior years, these non-degree students were not often eligible for the survey. The CERP team also began a pilot Data Buddies Survey for alumni and professionals – a non-student survey pathway to accommodate those who had already graduated and had entered the workforce. This additional pathway also opened doors for the CERP team to track more CRA-WP program participants. For example, participants of the CRA-WP Career Mentoring Workshops were now eligible to complete DBS.

Figure 1. DBS Partner Institutions from 2010-2020.



Note: "Active Buddies" includes all DBS departments that actively participated in the survey each year. "Elite Buddies" includes active departments that received a 20% or greater response rate from students.

Figure 2. Responses to the spring DBS from 2010-2020.



Note: Data were not collected from graduate students in 2010. The survey was retired after data collection in 2019; as such, 2020 data were not collected.

Of course, these additional pathways meant more individuals were eligible to complete the survey. When we look at responses over time (Figure 3), we can see a jump in the number of responses to the survey in later years. These changes were important to make however, as the goal of

DBS data is to provide as much information back to the community as possible about the state of higher education in computing, with a particular lens pointed toward understanding the experiences of students (and now individuals) in computing and technology fields. The integration of non-



Expanding the Pipeline *(continued)*

traditional pathways through computing into the survey was in service of this goal.

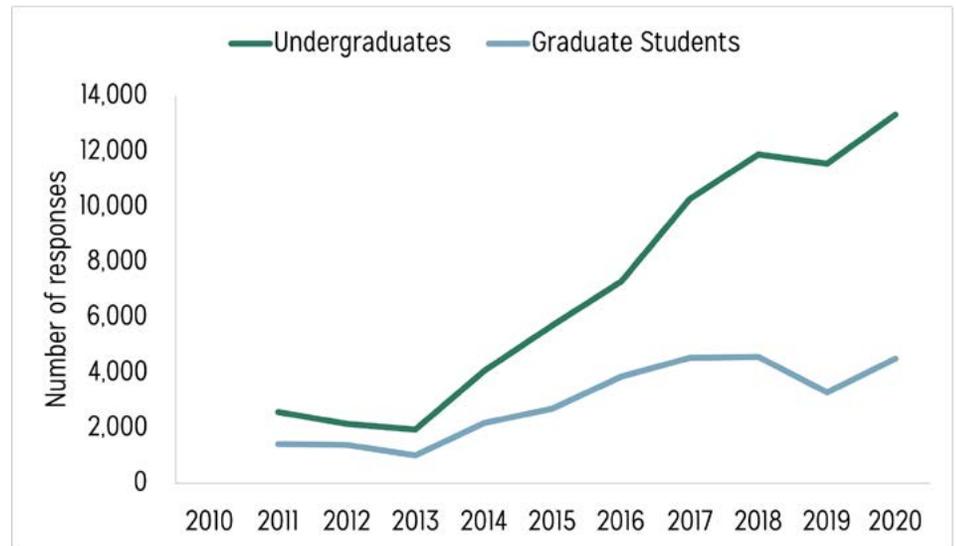
One important question the CERP team is often asked relates to the number of responses to the survey relative to the number of departments participating in the project. Figure 4 displays the average number of responses from undergraduate and graduate students per institution over time. As shown in Figure 4, the average number of responses per institution for undergraduate students steadily increased over time, apart from downward trends from 2011-2013 and in 2019. The average number of responses per institution for graduate students stayed steadier over time, though saw a small increase over time from 2015-2018.

DBS today

Today, DBS is running stronger than ever. DBS departments can request customized reporting with CERP's new adaptive reporting infrastructure. CERP has also started reporting DBS data at an aggregated level through the new [DBS Annual Report](#). As a next step, CERP will start reporting DBS measures longitudinally in an interactive report like the one available on an annual basis.

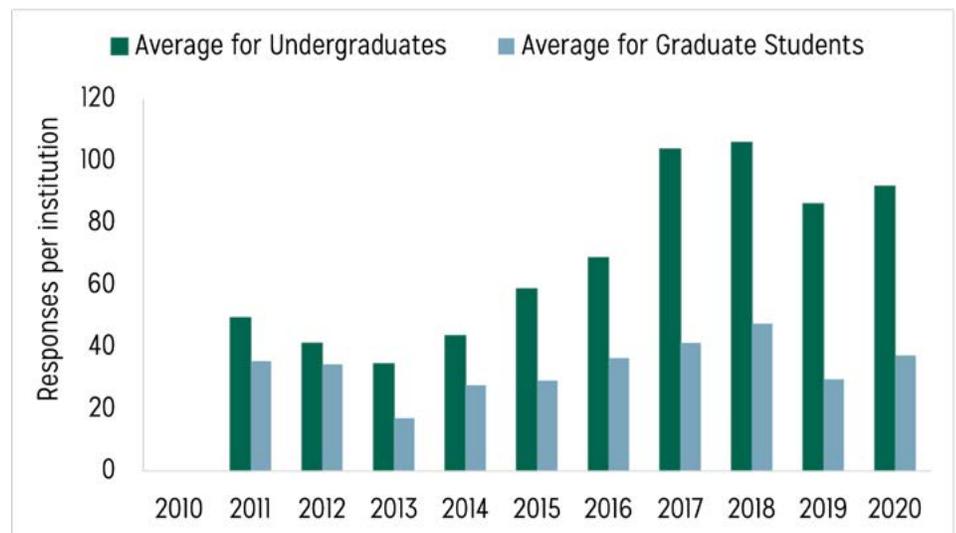
In addition to the various types of reports, CERP uses DBS data to publish infographics with research findings through Computing Research News (see Figure 5). These infographics typically feature an important research question related to understanding the experiences of students in computing and technology, often with a lens focused toward students from populations considered underrepresented in computing

Figure 3. Undergraduate and graduate student responses to fall DBS from 2010-2020.



Note: Data were not collected from undergraduate and graduate students in 2010.

Figure 4. Average number of responses from undergraduate and graduate students per DBS partner institution from 2010-2020.



Note: Data were not collected from undergraduate and graduate students in 2010. Average number of responses per year were calculated by dividing the total number of student responses by the total number of DBS partner institutions. Calculations for graduate student averages did not include Bachelor's-only institutions.

or historically marginalized (i.e., women; people who are Black/African American, Hispanic/Latinx, Indigenous and First Nations,

Native Americans, Alaska Natives, Native Hawaiians, and Pacific Islanders; persons with disabilities; persons from low-income



Expanding the Pipeline *(continued)*

Figure 5. Example of CERP Infographics in Computing Research News.



backgrounds; first generation college students; LGBTQIA+ individuals; and veterans).

Finally, CERP recently overhauled the [Data Buddies webpage](#) to include more details about the project, how to get involved, and a comprehensive set of frequently asked questions. Departments can [request copies](#) of the DBS survey, and researchers can [request a de-identified, aggregated dataset](#). CERP announced this update through a [blog post](#) featured on the brand new [CERP Bulletin](#), the go-to resource for keeping up with CERP's activities.

Is your department on the [list of Data Buddies](#)? If not, we encourage you to join today! To join the 2021 survey cycle, new departments should [submit a volunteer form](#) no later than November 1, 2021. This allows the CERP team to have time to engage with your Institutional Review Board (IRB), ensuring the project can move forward prior to the close of the survey.

About the author:

Heather Wright serves as the Associate Director of the Center for Evaluating the Research Pipeline (CERP). In her role, Wright leads CERP's evaluation efforts aimed at broadening participation in computing research and education. Wright also coordinates CERP's various research initiatives and supports the continued sustainability of the center. She has been with CERP and CRA since 2013.

This analysis is brought to you by the CRA's Center for Evaluating the Research Pipeline (CERP). CERP provides social science research and comparative evaluation for the computing community. Subscribe to the CERP newsletter [here](#). Volunteer for Data Buddies by signing up [here](#).

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CRA Taulbee Survey Announcement

The 2021 CRA Taulbee Survey will be starting soon. As has been our recent practice, the survey will be split into two parts, salary and main (everything else). This allows us to set an earlier deadline for the salary section in order to produce a preliminary salary report in December, while giving departments more time to collect and enter the information in the rest of the survey if needed.

Taulbee Schedule

- By September 20: Each academic unit head will receive an email about this year's survey and so will the Taulbee primary contact(s), if separate. The data-gathering pdf will also be available at this time.
- September 27: Both Salary and Main surveys open for input
- November 29: Due date for salary section.
- Late December: Preliminary salary report available to participants.
- January 24, 2022: Due date for the main Taulbee section.
- April 2022: Full Taulbee report to CRA members and participating departments.
- May 2022: Published in *CRN*.

The Taulbee Survey is open to all academic units that grant doctorates in Computer Science, Computer Engineering, or Information. If you have any questions, contact Betsy Bizot at bizot@cra.org.

CRA Executive Director Andrew Bernat Retires After Nearly Two Decades of Leadership

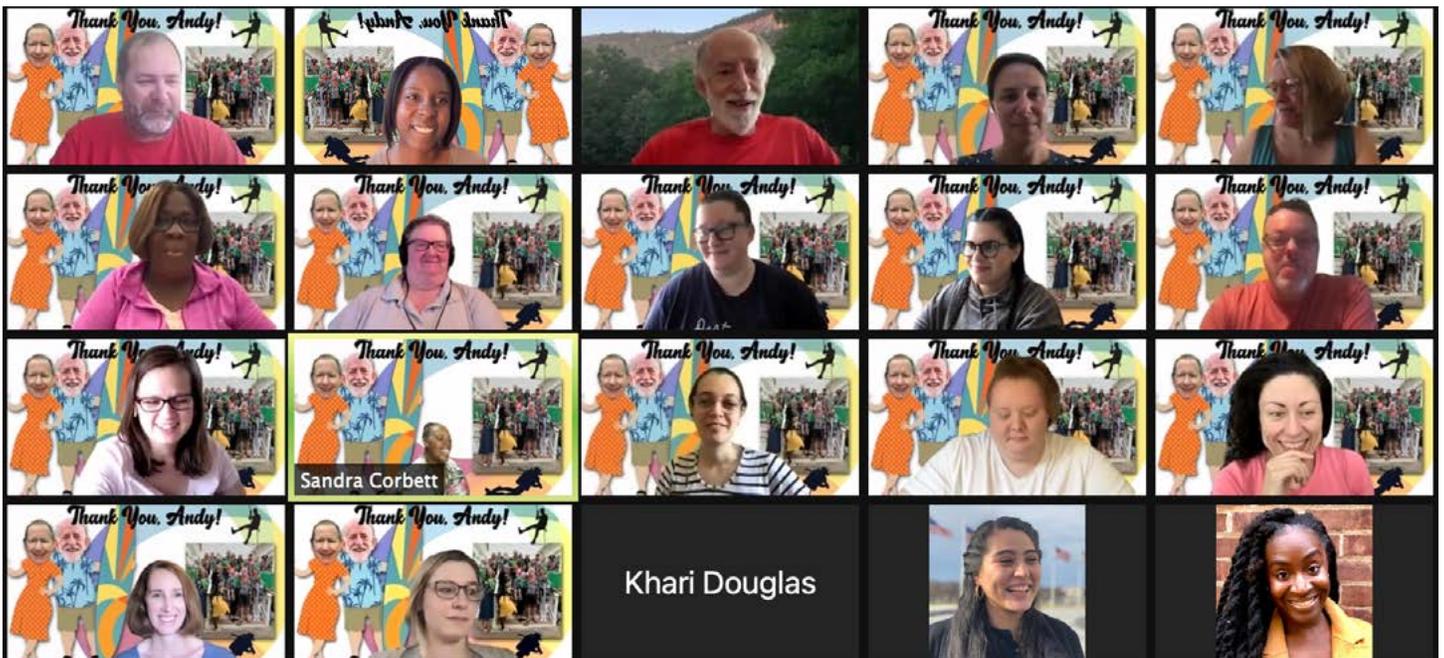
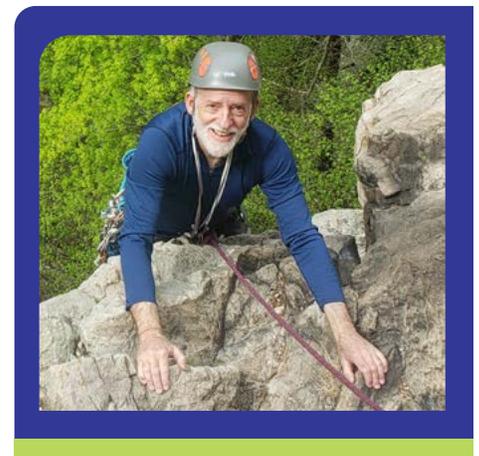
After nearly 20 years at the helm of the Computing Research Association, Executive Director Andrew Bernat has retired from his position, marking the close of his incredible career that has spanned more than 40 years. Over the course of his career, he was founding member and chair of the Computer Science Department at the University of Texas at El Paso, a NSF Program Director and finally executive director of CRA since 2002. Under his leadership the association has seen a dramatic, positive transformation, more than tripling in size and launching significant new efforts in research visioning, widening participation, and postgraduate support, while remaining the organization of record for computing research issues in Washington policy circles.

At the July CRA board meeting, Bernat reflected on how he has seen the organization evolve over the past two decades. During his tenure, CRA has seen incredible growth - strengthened its financial position, expanded scope of initiatives and increased staffing support. He also recognized CRA's shift to becoming more active in leading the computing community.



CRA would like to thank Bernat for all he has done for the organization and the computing field. In recognition of his many years of service, CRA staff organized a Hawaiian luau themed farewell party and surprised him at a virtual staff meeting with a custom Zoom background in his honor. He will be greatly missed!

Peter Harsha, CRA's Director of Government Affairs, will serve as CRA's Interim Executive Director while the search for Bernat's successor continues.



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Column Editor

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Patty Lopez, Intel

AAAS Science & Technology Policy Fellowships

Applications are now being accepted for the AAAS Science & Technology Policy Fellowships (STPF). This professional-level fellowship is the premier opportunity for outstanding computer scientists to learn first-hand about policymaking, bring valuable expertise to policy, and enhance scientific representation in the federal government.

Gain hands-on policy experience, help develop and execute solutions to address societal challenges, and join a strong corps of more than 3,400 policy-savvy alumni fellows working across sectors to serve the nation and citizens around the world.

Fellows serve yearlong assignments in all three branches of the federal government in Washington D.C. and represent a broad range of backgrounds, disciplines, and career stages. Fellow contributions can include data science and data analysis to drive programs and policies. STPF is seeking candidates with a strong background in mathematics and computer science an interest in career transformation and a desire to help impact federal policy.

QUALIFICATIONS

- Doctoral-level degree (Ph.D., MD, DVM, DSc, etc.) in any scientific, social science, or engineering discipline.
- Master's in engineering with three years of engineering-related professional experience.
- U.S. citizenship.

STIPEND & BENEFITS

- \$83,000–115,000.
- Health insurance.
- Travel/training and relocation allowances.

APPLICATIONS DUE:

November 1, 2021

FELLOWSHIP YEAR:

September 1, 2022 – August 31, 2023

APPLY TODAY:

https://fellowshipapp.aaas.org/app/main/?utm_source=jobpost&utm_medium=web&utm_campaign=stpf-2021-app-promo&utm_content=cra

Questions?

Email us at fellowships@aaas.org

Amherst College

Assistant Professor of Computer Science

The Amherst College Department of Computer Science invites applications for a full-time tenure-track position at the rank of assistant professor, beginning July 1, 2022. Candidates in all areas of computer science are encouraged to apply. Within the last decade, Amherst College has profoundly diversified its student body in terms of socioeconomic status, ethnicity, race, and nationality. Today, 57% of the students receive financial aid; 45 percent of our students identify as domestic students of color; and 10 percent of our students are international students. Our expectation is that the successful candidate will excel at

teaching and mentoring this extraordinarily talented group of students who are broadly diverse with regard to race, ethnicity, socioeconomic status, gender, nationality, sexual orientation, and religion.

Both research and teaching are supported by the college, which is situated within a vibrant intellectual community (including the University of Massachusetts Amherst, an R1 university with a highly ranked CS department). The department comprises seven tenure-line faculty with research programs in performance modeling, natural language processing, data science, machine learning, distributed algorithms, and systems. A number of faculty are supported by NSF research grants. The department is housed in a recently constructed science center that contains top-notch research and teaching facilities. The teaching load is two courses per semester.

Amherst College is a small, highly selective liberal arts college located in western Massachusetts. The college is part of the Five College Consortium, which supports collaborations with nearby Hampshire, Mount Holyoke, and Smith Colleges, and affords many opportunities for joint work with researchers at the University of Massachusetts.

The successful candidate must have a Ph.D. in computer science or have fulfilled all requirements for the degree by the start of the appointment. A cover letter, curriculum vitae, research and teaching statements, and three confidential letters of recommendation should be submitted electronically to <https://apply.interfolio.com/89385>.

Applications received by October 18, 2021, will be assured of full consideration. Review of applications will continue until the position is filled.

Amherst College is an equal opportunity employer and encourages persons of all genders, persons of color, and persons with disabilities to apply. The college is committed to enriching its educational experience and its culture through the diversity of its students, faculty, and staff.

Arizona State University

Lecturer

The Ira A. Fulton Schools of Engineering at Arizona State University (ASU) seeks applicants for a full-time Lecturer position beginning Fall 2021. The position is based in Tempe, Arizona but as the School of Computing, Informatics, and Decision Systems Engineering (CIDSE) has locations on both the Tempe and Polytechnic campuses, some travel between locations should be expected. The job will involve teaching courses and facilitating student activities for the online Master of Engineering with an area of study in Computing and Technology. Students in this program are working professionals in China working to advance their technical knowledge and career advancement in computing and technology. Reporting to the CIDSE Director – Master of Engineering China, this position will provide program instruction in an online format, incorporating innovative teaching methodologies, cutting-edge technologies and other industry trends reflecting advancements in the computer science

discipline. We are seeking an individual fluent in Mandarin with a strong passion for student success.

The position may also support the development of online graduate courses and student activities delivered in Mandarin. This is a non-tenure-track appointment with a renewable annual contract (12-months). Appointments will be made at the rank of Lecturer commensurate with the candidate's experience and accomplishments.

The successful candidates for this position will have a demonstrated record of excellence in teaching one or more Computer Science & Engineering subjects including but not limited to: computer architecture and systems, computer networks, computer security, operating systems, software engineering, data structures and algorithms, programming languages, compilers, mobile computing, and database systems. Lecturers also contribute to the service mission of the programs through student outreach activities, service on committees, and industry engagement activities in support of the Master of Engineering (Computing & Technology) degree program. Faculty are also expected to remain engaged in the profession through professional development and external services.

A minimum of an M.S. in Computer Science, Software Engineering, Computer Engineering or a related discipline is required. Preference will be given to those candidates with a Ph.D. or near completion of a Ph.D. with proven teaching skills in undergraduate education in both

full-immersion and digital immersion formats. Professional experience in the areas of software application and systems development and a commitment to work collaboratively with a diverse student population is also desirable. Candidates must have mastery of written and verbal communication in Mandarin and English.

Review of applications will commence on July 5, 2021. Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is filled.

Apply at

<https://hiring.engineering.asu.edu/>

Candidates will be asked to submit the following through their Interfolio Dossier:

- Cover letter
- Current CV
- Diversity Statement*
- Statement describing teaching experience
- Evidence of excellence in teaching and innovation
- Evidence of curriculum and/or program development
- Experience teaching online courses or using digital media in teaching and learning
- Contact information for at least three references

*The ASU Charter states, "ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and

how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.” The diversity statement provides applicants an opportunity to demonstrate their past and current activities in promoting diversity, equity, and inclusion and how future activities will align with upholding the ASU Charter.

For further information or questions about this position, please contact Dr. Yinong Chen (YINONG.CHEN@asu.edu).

A background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other basis protected by law.

(See <https://www.asu.edu/aad/manuals/acd/acd401.html> and <https://www.asu.edu/titleIX/>.)

In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU’s Annual Security and Fire Safety Report is available online at <https://www.asu.edu/police/PDFs/ASU-Clery-Report.pdf> You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.

Arizona State University

Lecturer (all ranks) in Computer Science

The School of Computing, Informatics, and Decision Systems Engineering (CIDSE) in the Ira A. Fulton Schools of Engineering at Arizona State University (ASU) seeks applicants for a full-time lecturer position beginning January 2022. CIDSE has locations on the Tempe and Polytechnic Campuses so some travel between locations should be expected. However, most teaching assignments are likely to be courses in CIDSE’s online Masters degree program. This is a non-tenure track appointment with a fixed term academic year contract. Appointments will be made at the rank of Principal Lecturer, Senior Lecturer or Lecturer commensurate with the candidate’s experience and accomplishments. Opportunities exist to augment the academic year salary by assisting with summer instruction.

The successful candidate for this position will have a demonstrated record of excellence in teaching that incorporates active learning. Given the teaching will be at the master’s degree level, the successful candidate will have advanced knowledge in specialized topics such as Artificial Intelligence, Machine Learning, Big Data, Programming Languages, Cybersecurity, and Software Engineering. Lecturers also contribute to the service mission of CIDSE programs through student outreach activities, service on committees, and industry engagement activities. Faculty are also expected to remain engaged through professional development and external services.

A minimum of a M.S. in Computer Science, Software Engineering, Computer Engineering or a related discipline is required. Preference will be given to those candidates with a PhD or near completion PhD by the time of appointment with proven teaching skills in an online format. A commitment to work collaboratively with a diverse student population is also desirable.

Application deadline is October 15, 2021.

Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is filled. Apply at <https://hiring.engineering.asu.edu/>. Candidates will be asked to submit the following through their Interfolio Dossier:

- Cover letter
- Current CV
- Statement describing teaching interests
- Evidence of excellence in teaching and innovation
- Evidence of curriculum and/or program development
- Contact information for at least three references
- Diversity Statement

For further information or questions about this position please contact Prof. Kurt VanLehn (kurt.vanlehn@asu.edu)

A background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive

consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other basis protected by law.

(See <https://www.asu.edu/aad/manuals/acd/acd401.html> and <https://www.asu.edu/titleIX/>.)

In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU's Annual Security and Fire Safety Report is available online at <https://www.asu.edu/police/PDFs/ASU-Clery-Report.pdf> You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.

Arizona State University

Lecturer (all ranks) in Software Engineering

The School of Computing, Informatics, and Decision Systems Engineering (CIDSE) in the Ira A. Fulton Schools of Engineering at Arizona State University (ASU) seeks applicants for a full-time lecturer (all ranks) position beginning Fall 2021. This position is in primary support of the Software Engineering M.S. and B.S. programs on ASU's Polytechnic Campus, but lecturers are expected to support the instructional mission of all CIDSE programs. CIDSE has locations on the Tempe and Polytechnic Campuses so some travel between locations should be expected. In addition, CIDSE has an online presence and all faculty participate in the creation of curriculum and delivery of instruction in the

online modality. This is a non-tenure-track appointment with a renewable fixed-term academic year contract. Appointments will be made at the rank of Principal Lecturer, Senior Lecturer or Lecturer commensurate with the candidate's experience and accomplishments. Opportunities exist to augment the academic year salary by assisting with summer instruction.

The successful candidate for this position will have a demonstrated record of excellence in teaching that incorporates active and project-based learning plus an extensive knowledge of software engineering. Lecturers should have the ability to teach in multiple areas across the curriculum, including data structures and algorithms, programming languages, software security and information assurance, web and mobile applications, and computer systems and networks. Lecturers also contribute to the service mission of the programs through student outreach activities, serve on committees and in industry engagement activities in support of CIDSE. Faculty are also expected to remain engaged in professional development and external service.

A minimum of an M.S. in Computer Science, Software Engineering, Computer Engineering, or a related discipline is required by the time of the appointment. Preference will be given to those candidates with a Ph.D. or near completion of a Ph.D. by the time of the appointment with proven teaching skills in undergraduate education in both full-immersion and digital immersion formats. Professional experience in the areas of software application and systems development and a commitment to work

collaboratively with a diverse student population is also desirable.

Review of applications will commence on July 1, 2021.

Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is filled.

Apply at <https://hiring.engineering.asu.edu/>. Candidates will be asked to submit the following through their Interfolio Dossier:

- Cover letter
- Current CV
- Statement describing teaching interests
- Evidence of excellence in teaching and innovation
- Evidence of curriculum and/or program development
- Contact information for at least three references
- Diversity Statement*

*Candidates are required to submit a Diversity Statement, outlining their experience and commitment to enhancing diversity and access to education, and working broadly with diverse communities.

For further information or questions about this position please contact Dr. Srividya Bansal at (srividya.bansal@asu.edu)

A background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All

qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other basis protected by law.

(See <https://www.asu.edu/aad/manuals/acd/acd401.html> and <https://www.asu.edu/titleIX/>.)

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Beloit College

Tenure-track-assistant-professor-of-computer-science

Beloit College invites applications for a tenure-track position in Computer Science, beginning August 2022. Area of expertise is open, although preference will be given to candidates who are prepared to teach Machine Learning and Artificial Intelligence (AI), and other courses that will support our growing Data Science, Engineering and/or Cognitive Science programs.

A full job description, including information on how to apply can be found here:

<https://www.beloit.edu/live/profiles/5190-assistant-professor-of-computer-science>

Review of applications begins 9/1/21



Faculty Position in Computer Science at Bennington College

Bennington College invites applications for a full-time faculty position in computer science, beginning Fall 2022. The successful candidate will work with colleagues to create and implement an innovative and multidisciplinary approach to Computer Science, one that will build on our program's success of attracting students from diverse backgrounds and with a range of academic interests. Applicants with academic, industry, and/or artistic backgrounds in computer science and from all sub-specializations are encouraged to apply. The ability to teach and develop new courses in multiple subfields of computer science that can be integrated into a broad liberal arts curriculum is essential. An advanced degree in computer science or a closely related field is desirable, but not required. If desired, the option of a part-time position exists for an exceptional candidate.

Bennington College is a small residential liberal arts college in southern Vermont, long distinguished for its progressive approach to higher education. The College was founded in 1932 on the principle of active engagement in learning, which is manifest in individualized plans of study developed by students together with faculty. Bennington's open curricular structures facilitate innovative teaching across traditional disciplinary boundaries and small class sizes enable student-centered and engaged learning within the classroom. Faculty members at Bennington are teacher-practitioners whose professional work is in ongoing dialogue with their teaching and advising. Full-time faculty teach five courses per year, and fully engaged student advising is an expectation.

Bennington serves a diverse student population inclusive of members of ethnically/racially minoritized, international, LGBTQIA+, and disability communities as well as diverse gender identities, socioeconomic backgrounds, religions, and political beliefs. Our staff and faculty also reflect diverse and intersecting backgrounds and identities. All employees are expected to be respectful and responsive to these differences in the service of building community that promotes student and employee success. Each individual (faculty, staff and students) will be accountable for upholding these values. The College's approach to pluralism and inclusivity—both as fields of inquiry and practice—is to prioritize flexible thought, and to invite the examination of access, value, power, and privilege through its institutional policies and areas of study. We encourage applicants from diverse realms of interest, backgrounds, experience, and accomplishment to apply.

In recognition of the employment challenges sometimes faced by academic couples in small communities, the College will also consider applications to share equally a single full-time faculty position. Applicants must each submit an individual application and indicate in their cover letters that they are applying jointly.

Candidates should apply online below by submitting: 1) a letter of application; 2) a curriculum vitae; 3) a statement of teaching philosophy that includes descriptions of three potential course offerings; 4) a statement of research interests and plans; 5) links to, or examples of, relevant recent professional work; 6) a brief statement on the candidate's potential to contribute to an increasingly diverse and inclusive environment through teaching, research, and/or service; and 7) contact information for three references.

Review of applications will begin on October 1, 2021 and will continue until the position is filled. This position requires the successful completion and acceptable results of a background check.

Apply online: <https://apptrkr.com/2424630>

Berry College

Assistant/Associate Professor in Computer Science (Tenure-Track)

The Department of Mathematics and Computer Science at Berry College invites applications for a tenure-track Assistant or Associate Professor position in Computer Science starting August 2022. The successful candidate will have the opportunity to help shape the development and growth of a new Computer Science major. Teaching responsibilities include core courses in the curriculum, as well as electives in the candidate's area of interest. We are particularly interested in receiving applications from members of underrepresented groups and strongly encourage women and persons of color to apply. Find out more about this position and Berry College at <https://berry.interviewexchange.com/jobofferdetails.jsp?JOBID=135025>.

Brown University

Professor of Cybersecurity and International and Public Affairs

The Watson Institute for International and Public Affairs at Brown University invites applications for a faculty position in "cyber and security" to begin in July 2022. We are seeking applicants whose research focuses on various aspects of the intersection between cyber technologies and human security. Research of interest includes, but is not limited to, topics such as the impact of algorithm-based surveillance on marginalized

communities, the strategic manipulation of cyber information for geopolitical gain, the intersection between social media and surveillance, the implications of autonomous weapon systems and drone warfare, and the development of offensive and defensive cyber weaponry.

This faculty position will involve a joint appointment between the Watson Institute and a relevant tenure-granting disciplinary department at Brown. We are seeking applicants who have both proven technical expertise and the ability to engage existing areas of strength in the Watson Institute. We welcome applicants with doctoral degrees from all relevant disciplines, including STEM fields (e.g., Computer Science, Applied Mathematics) and the social sciences (e.g., Sociology, Economics, Political Science, Anthropology, History, Africana Studies). The Watson Institute is especially interested in qualified candidates who can contribute through their research, teaching, and service to the diversity and excellence of the academic community.

Candidates at all ranks are welcome. A successful senior candidate must have an outstanding record of scholarly achievement, a proven record of successful research funding, and a demonstrated commitment to undergraduate and graduate teaching and advising. A successful junior candidate must be engaged in a research program with the potential to influence their field, and a strong commitment to undergraduate and graduate teaching and advising.

Junior candidates must have completed the PhD by the time of appointment. Review of applications will begin November 22, 2021, but applications will be accepted until the position is filled.

All candidates should submit: 1) a cover letter describing research completed and planned, 2) a curriculum vitae, 3) a short writing sample, and 4) a teaching statement. We ask that in both the cover letter and teaching statement, the candidate describe how their work fosters inclusive learning and diversity.

Senior candidates should include the names of five references whom the search committee can contact at an appropriate time. The list of references can be submitted via the "additional documents" field in Interfolio.

Junior candidates should have three letters of reference and their official graduate transcript uploaded to Interfolio at the time of the application. The confidential recommendation letters should be uploaded to Interfolio by the referee.

Brown University is committed to fostering a diverse and inclusive academic global community; as an EEO/AA employer, Brown considers applicants for employment without regard to, and does not discriminate on the basis of, gender, race, protected veteran status, disability, or any other legally protected status.

Apply here: <http://apply.interfolio.com/90590>

Bryn Mawr College

Department of Computer Science

Assistant Professor

The Department of Computer Science at Bryn Mawr College invites applications for a full-time, tenure-track Assistant Professor position to begin August 1, 2022. We are seeking candidates specializing in any of the following areas: theory, algorithms, or systems. The successful candidate will contribute to the development and teaching of a diverse and inclusive undergraduate curriculum, including interdisciplinary programs and college-wide initiatives such as the 360 Program and the Emily Balch Seminars. The candidate will be expected to teach courses at all levels of the undergraduate program in computer science and to establish an active and successful research program. Candidates must have completed all Ph.D. requirements in Computer Science or a closely related field by the start date.

To apply for this position, candidates must submit a cover letter, curriculum vitae, teaching philosophy, research statement, and statement of demonstrated commitment to diversity and inclusion to the Computer Science Search Committee via Interfolio at: <https://apply.interfolio.com/90015>. In addition, arrange for three letters of recommendation to be submitted via Interfolio to the Computer Science Search Committee.

Applications will be accepted until the position is filled. Applications received by October 18, 2021 will receive full consideration.

Recognizing health and safety concerns during this time, the College will be as flexible as possible in determining the nature of any interviews or meetings (virtual/remote and/or in-person interaction) that are conducted for this search.

Bryn Mawr College is a distinguished liberal arts college for women with a vibrant faculty of scholar-teachers, a talented staff, and intellectually curious students eager to make a difference in the world. The College is committed to increasing the diversity of its students, faculty, staff, and curricular offerings with a particular focus on enhancing ethnic and racial diversity and advancing social justice and inclusion. We believe diversity strengthens our community and enriches the education of our students. We have a student body of 1,300 undergraduates (32 percent are U.S. students of color and 19 percent are international students). There are 340 graduate students in coeducational graduate programs in social work, humanities, and science. Bryn Mawr College is located in metropolitan Philadelphia and enjoys strong consortial relationships with Haverford College, Swarthmore College, and the University of Pennsylvania. Bryn Mawr College is an equal-opportunity employer; candidates from underrepresented groups and women are especially encouraged to apply.

Carnegie Mellon University School of Computer Science

Faculty Hiring SCS CRA AD 2021

The School of Computer Science at Carnegie Mellon is the world's leading college in

academic research and education. The college houses seven departments: Computational Biology, Computer Science, Human-Computer Interaction, Software Research, Language Technology, Machine Learning, and Robotics.

SCS is seeking to fill several faculty positions, across all departments, in all tracks and at all levels, with joint appointments when appropriate. The four faculty tracks in our College include: tenure, research, systems and teaching tracks. We are seeking candidates with a strong interest in research, an earned Ph.D. (in computer science or relevant field), and outstanding academic credentials. Such candidates must possess the ability to collaborate with other faculty in a fast-paced environment. Candidates for tenure and teaching track appointments should also have a strong interest in graduate and undergraduate education and therefore must be prepared to teach in a wide variety of settings, for example, large undergraduate lecture courses and classes delivered in non-traditional formats. Research track faculty are not required to teach and generally focus most or all of their effort on cutting-edge research. Systems Track similarly teach only on an exception basis and focus all or most of their effort on making novel systems.

Candidates with a commitment toward building an equitable and diverse scholarly community are particularly encouraged to apply. We continuously seek to improve the diversity of our student, staff and faculty populations, including and especially through annual faculty hiring processes.

Each department's hiring committee thoroughly reviews the qualifications of every applicant, and are particularly enthusiastic about applicants whose background and experiences would make them unique among our faculty. Applications from candidates who have a demonstrated track record in mentoring and nurturing women and students from groups traditionally underrepresented in computer science are strongly encouraged.

We will begin accepting applications beginning August 2, 2021.

To ensure full consideration of your application, please submit all materials no later than December 8, 2021. In your cover letter, please indicate clearly the department(s) you are applying to. You can learn more about our hiring plans and application instructions by visiting <https://scsdean.cs.cmu.edu/faculty-hiring> IMPORTANT: At this site you will find guidance regarding specific timelines for review of applications in each of our departments.

Please send email to faculty-search@cs.cmu.edu with any questions.

Carnegie Mellon University shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and

subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

Case Western Reserve University, Cleveland, Ohio

Faculty Position in Department of Computer and Data Sciences

The Department of Computer and Data Sciences in the Case School of Engineering at Case Western Reserve University (CWRU) invites applications for a tenure-track faculty position.

This search prioritizes Assistant and Associate Professor candidates in Artificial Intelligence, Machine Learning, Algorithmic Fairness, Data Science, and Computer Systems. However, we will consider exceptional candidates at all ranks and in all areas of Computer and Data Sciences. In addition to foundational research, candidates with collaborative research programs in applied areas of Computer and Data Sciences are encouraged to apply.

The Department of Computer and Data Sciences was formed in 2019 out of the Department of Electrical Engineering and Computer Science, with the vision that computing and data sciences will play a central role in interdisciplinary research and education throughout the university.

For more information and to submit an application, please visit <https://engineering.case.edu/computer-and-data-sciences/employment>

CWRU provides reasonable accommodations to applicants with disabilities. Applicants requiring a reasonable accommodation for any part of the application and hiring process should call 216-368-3066.

Columbia University

Postdoctoral Research Scientist

The Data Science Institute (DSI) at Columbia University invites applications for the position of a Data Post-Doctoral Scientist. The post-doc will work on new methods for scalable and privacy-respecting digital identity systems. These systems will provide digital identities suitable for low-infrastructure environments, used to facilitate access to resources such as medical care, education and food assistance. These highly secure systems will provide unprecedented new levels of resistance to identity theft.

The candidate will evaluate existing digital identity proposals, identify gaps in capabilities, develop new components of identity systems, work with external stakeholders and experts in privacy and international development, and prototype digital identity components or systems.

Please apply here: <https://apply.interfolio.com/89896>

DePaul University

Term Faculty (Non-Tenure Track) – Computer Science/Data Science

The School of Computing at DePaul University invites applications for a full-time non-tenure-track faculty position at the rank of Instructor to begin on January 3rd, 2022. The faculty appointment is with full benefits, and renewable contingent upon satisfactory performance.

We seek a candidate with a commitment to high-quality teaching. The candidate will have additional responsibilities including curriculum development, and other service to the School. The minimum requirement for the position is a MS in Computer Science or related discipline with 5+ years of professional experience in the field. Preference will be given to candidates who have, or are close to having, a PhD in Computer Science or related field as well as teaching experience. Special areas of interest include database management, foundations of computer science, full stack web application development and machine learning.

Rank and salary are commensurate with qualifications and experience. The position is contingent upon available budgetary resources.

DePaul's School of Computing is a unit of the College of Computing and Digital Media, an interdisciplinary college with a broad range of innovative programs including Cyber-Physical Systems Engineering, Computer Science, Game Development, Human Computer

Interaction, Information Security, Data Science, and Software Engineering. Located in the heart of Chicago's central business district, the school is equipped with state of the art research labs, supports many dynamic interdisciplinary research groups, and offers an opportunity to forge working relationships with industry. The School of Computing includes more than 60 full-time faculty, more than 3,000 undergraduate majors and graduate students and offers Bachelor's, Master's, and PhD programs.

DePaul University seeks applicants that reflect the diversity of its student body and the city of Chicago. Applicants who have experience working with a diverse range of faculty, staff, and students, and who can contribute to an inclusive climate are encouraged to identify their experiences in these areas. Women and members of historically underrepresented groups are especially encouraged to apply.

DePaul University is an Equal Opportunity / Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, ethnicity, religion, sex, sexual orientation, gender identity, national origin, age, marital status, physical or mental disability, protected veteran status, genetic information or any other legally protected status, in accordance with applicable federal, state and local EEO laws.

Qualifications

Applicants should have at a minimum a MS degree in Computer Science or a related field with at least 5 years of professional experience in the field. Preference will be

given to applicants with a PhD degree in a computing field. Teaching experience is preferred.

Application Instructions

Apply at <https://apply.interfolio.com/86584>.

Applications will be accepted until the position is filled. For priority consideration, application materials should be received by September 10th, 2021.

Applicant Documents:

Curriculum vitae,

A minimum of three letters of recommendation,

Teaching statement

Diversity statement that addresses the candidate's values, experiences and future plans concerning diversity, equity, and inclusion in teaching.

Fort Hays State University

Assistant Professor - Computer Science

The Department of Computer Science is seeking applicants for a nine-month, tenure-track faculty position to start Fall 2022. The faculty member will teach a full load (12 credits) of courses during the Fall and Spring semesters. The courses to be taught include lower- and upper-division undergraduate courses in computer science with options for paid overload, including during the summer session. Classes include face-to-face as well as online delivery.

FHSU and the Department of Computer Science is committed to building an environment that is inclusive and representative of our students and state,



Founding Tenured/Tenure-Track Faculty in Computer Architecture and System

The Hong Kong University of Science and Technology (HKUST) is a leading international university ranked 1st by Times Higher Education Young University Rankings 2020 and 27th by QS World University Rankings 2021. HKUST establishes a new campus in Guangzhou, China (hkust-gz.edu.cn). The Guangzhou campus synergizes with and maintains the same academic standard as the Clear Water Bay campus. Microelectronics Thrust is an academic department focusing on theories and technologies for novel circuits, architectures, systems, and design automations.



Microelectronics Thrust has multiple tenured/tenure-track positions at the ranks of Assistant Professor, Associate Professor, and Professor. Applicants should have a PhD degree and research in areas such as [processor, memory, and storage system architecture](#); [reconfigurable architecture](#); [interconnection network](#); [multiprocessor system](#); [neural computing](#); [approximate computing](#); [quantum computing](#); [hardware-software codesign](#); [compilation techniques](#); [operating system](#); [system software](#); [power management](#); [thermal management](#); [embedded system](#); [system-on-chip](#); [system-in-package](#); [electronic design automation](#); [photonic design automation](#); [integrated photonic circuit](#); [RF/mm-Wave/terahertz technology](#); [modeling and simulation technology](#); [emerging technology](#). English is the instruction and administration medium at the Guangzhou campus, and a good command of written and spoken English is required.

- Applicants of tenure-track Assistant Professor should demonstrate strong research and teaching potentials.
- Applicants of Associate Professor should have a proven record in research, teaching, student supervision, and funding.
- Applicants of Professor should have world-class academic achievements, international academic leadership, and an established track record in teaching, student supervision and funding.

Salary and Conditions: Salary is of international standard and highly competitive. Generous research funding, ample laboratory space, and excellent research equipment and support will be provided. All the positions are tenured/tenure-track appointments in mainland China and offered by the HKUST mainland entity in accordance with the local employment laws and regulations. The appointments to Full Professor and some Associate Professor will be made on substantive basis. The initial appointments to Assistant Professor will be made on a fixed-term contract of up to three years, and re-appointments thereafter will be subject to performance and mutual agreement.

Application Procedure: Applications should be submitted at <https://facrecruit.hkust.edu.hk> which will be open until the positions are filled. If there is any question, please contact the Acting Head, Prof. Jiang Xu, at jiang.xu@ust.hk. HKUST is committed to equal opportunity and diversity in recruitment and employment. We strongly encourage candidates of diverse backgrounds to apply.



so we encourage women and members of underrepresented groups to apply.

To apply for this position, please visit <https://fhsu.wdl.myworkdayjobs.com/CAREERS>.

Only electronic applications submitted through the webpage will be accepted.

Hampden-Sydney College

Assistant Professor of Computer Science

The Department of Mathematics and Computer Science at Hampden-Sydney College invites applications for a tenure-track Assistant Professor of Computer Science position beginning August 2022.

For more details and to apply, see: <https://apply.interfolio.com/92092>.

Institute of Science and Technology Austria

Professor (tenure-track) and Professor positions in Computer Science and Data Science

The **Institute of Science and Technology Austria** invites applications for several open positions in all areas of computer science and data science.

We especially welcome applications in statistics, machine learning, optimization, bioinformatics, scientific computing, computer systems, control theory, and robotics.

We offer:

- A highly international and interdisciplinary research environment with English as working language on campus

- State-of-the-art facilities and scientific support services (www.ist.ac.at/scientific-service-units)
- Substantial start-up package and attractive salary
- Guaranteed annual base funding including funding for PhD students and postdocs
- An international Graduate School with high admissions criteria and a rigorous training program
- Leadership program
- Employee Assistance Program
- Dual Career support packages
- Child-care facilities on campus (for children aged 3 months till school age)

IST Austria (www.ist.ac.at) is an international institute dedicated to basic research and graduate education in the natural, mathematical, and computational sciences. The Institute fosters an interactive, collegial, and supportive atmosphere, sharing space and resources between research groups whenever possible, and facilitating cross-disciplinary collaborations. Our PhD program involves a multi-disciplinary course schedule and rotations in research groups, and we hire scholars from diverse international backgrounds. The campus of IST Austria is located close to Vienna, one of the most livable cities in the world.

Assistant professors receive independent group leader positions with an initial contract of six years, at the end of which they are reviewed by international peers. If the evaluation is positive, an assistant professor is promoted to a tenured professor.

Candidates for tenured positions are distinguished scientists in their respective research fields and typically have at least six years of experience in leading a research group.

IST Austria values diversity and is committed to equal opportunities. We strive to increase the number of women, particularly in fields where they are underrepresented, and therefore we strongly encourage female researchers to apply.

Please apply online at: www.ist.ac.at/jobs/faculty/

The closing date for applications is **October 29, 2021**.

For enquiries, please contact faculty.recruiting@ist.ac.at.

Iowa State University

Multiple Tenure Track Positions

The Department of Computer Science in the College of Liberal Arts and Sciences at Iowa State University seeks outstanding applicants for multiple tenure-track faculty positions at the rank of Assistant Professor. We are looking for candidates in all areas of Computer Science who complement and expand our current research strengths, including but not limited to, broad areas of artificial intelligence, computer vision, machine learning, and natural language processing, computer networks, computer security, embedded, real-time and autonomous systems, high-performance computing, mobile computing, and operating systems.

The Department of Computer Science resides in the College of Liberal Arts and Sciences offering B.S., M.S., and Ph.D. degrees in Computer Science and a brand-new M.S. degree in Artificial Intelligence. The department is proud to be one of the founding departments for the B.S. in Software Engineering, B.S. in Data Science, Data Science Minor and Certificate along with the B.S. and Ph.D. degrees in Bioinformatics and Computational Biology. We are active in interdepartmental graduate programs in Bioinformatics and Computational Biology, Human-Computer Interactions, and Information Assurance.

The department participates in many interdisciplinary research collaborations, including partnerships with faculty in bio-sciences, mathematical sciences, and engineering. The Department of Computer Science has 37 faculty professionals, 684 B.S. students, 56 M.S. students, and 128 Ph.D. students. Most of the department's Ph.D. students are supported by research or teaching assistantships. We have strong research and educational programs in Algorithms and Complexity, Artificial Intelligence, Bioinformatics, and Computational Biology, Databases, Data Mining, Information Assurance, Programming Languages, Molecular Programming, Multimedia Systems, Networks, Operating Systems, Robotics, and Software Engineering.

The successful candidate will be responsible for developing and sustaining a strong research program; developing collaborative and interdisciplinary research; publishing in top venues; supervising

outstanding graduate students; teaching undergraduate and graduate courses, and enhancing ISU through professional and institutional service. We are interested in exceptional candidates that can expand our research profile in new research areas.

We are seeking candidates who share in our mission of achieving excellence through diversity and inclusion. In the Department of Computer Science, and at the University as a whole, we translate the values of diversity and inclusion into action by seeking a diverse faculty and by seeking individuals who have experience working with diverse students, colleagues, staff, and constituents.

We are accepting applications starting July 16, 2021. To ensure full consideration of your application, please submit all materials no later than October 1, 2021.

To apply for these positions and for more information see <https://www.cs.iastate.edu/open-positions>. Please send an email to cs-search@iastate.edu with any questions.

Iowa State University is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, age, religion, sex, sexual orientation, gender identity, genetic information, national origin, marital status, disability, or protected veteran status and will not be discriminated against.

Lafayette College

Assistant Professor - Computer Science Department

The Lafayette College Computer Science Department invites applications for a full-time, tenure-track Assistant Professor position commencing in July 2022. Candidates should be able to teach one or more systems courses such as Networks, Databases, Operating Systems, Distributed Computing or Computer Organization. Candidates from all computing related research areas including interdisciplinary ones are encouraged to apply. Candidates should have earned a Ph.D. in computer science or a related field by the start of their appointment. The department especially welcomes applications from candidates who will contribute to Lafayette commitment to diversity and inclusion.

The Department is an ABET accredited program consisting of seven full-time tenure-track faculty positions. The department faculty have a diverse set of interests ranging from theoretical computer science and computer systems to tutoring systems, agent based systems, natural computing and biological modeling. Reflecting this wide range of interests, the department is very supportive of interdisciplinary work and consistently reaches out to other parts of the college to support computation in all its many forms.

The department offers Bachelor of Science and Bachelor of Arts degrees in computer science, as well as minors in computer science and computational methods. Department faculty also play a key role in

the newly established data science minor. Faculty members teach the equivalent of four courses in their first year and five courses per year thereafter. The college and department are very supportive of research with funds for conference/research travel available and a student research program (the EXCEL Scholars program) where students collaborate closely with faculty to support their research goals. For more details about the department, program and the position, please see our webpage: <https://compsci.lafayette.edu>.

Applicants should submit their application materials through apply.interfolio.com/90148. The application materials (cover letter, c.v., teaching statement, research statement and 3 letters of recommendation) should demonstrate the applicant's commitment to teaching in an undergraduate, liberal arts environment and address how the applicant's teaching, research, and/or service will support Lafayette's commitment to diversity and inclusion as articulated in the college's diversity statement (<https://diversity.lafayette.edu/diversity-and-inclusion/>).

Review of applications will begin on October 22, 2021. However, applications will be accepted until the position is filled.

Questions about the position should be directed to Prof. Chun Wai Liew, Department Head and Search Committee Chair, at liewc@lafayette.edu.

Located within 70 miles of New York and Philadelphia, Lafayette College is a highly selective undergraduate liberal arts and engineering institution with significant

resources to support faculty members in their teaching and scholarship. Lafayette College is committed to creating a diverse community: one that is inclusive and responsive, and is supportive of each and all of its faculty, students, and staff. All members of the College community share a responsibility for creating, maintaining, and developing a learning environment in which difference is valued, equity is sought, and inclusiveness is practiced. Lafayette College is an equal opportunity employer and encourages applications from women and minorities.

National Institutes of Health

Scientific Director National Library of Medicine

THE POSITION: The National Library of Medicine (NLM) seeks an outstanding Scientific Director to lead its Intramural Research Program (IRP). NLM is embarking on a bold new direction for its IRP, unifying its strong programs in computational biology and computational health sciences into a single program and expanding its role in advanced computation, analytics, and visualization to accelerate discovery from biological and clinical data. NLM's IRP researchers develop innovative approaches, methods and strategies that are *unbiased, accessible and reusable* across domains. Research supported by NLM may be motivated by specific health conditions or biological problems, including those of interest to other NIH programs, and by national goals for developing intelligent computational tools to analyze

and understand all types of biomedical, biological, and public health data.

The NLM Scientific Director directs the activities of intramural research and research training. NLM's current research emphases lie in two areas: 1) computational health, which focuses on natural language processing, clinical image processing, biomedical ontologies and information models, and clinical analytics; and 2) computational biology which includes transcription, chromatin and networks; structure and function; sequence statistics; and evolutionary genomics. NLM is expanding the size and scope of its IRP to address the growing demand for innovative data science and informatics approaches in biomedicine. The proximity of NLM's intramural research program to NLM's significant collections of digital data and biomedical information resources provides unparalleled opportunities for collaboration with key developers of these flagship NLM data resources, as well as with intramural researchers at other NIH institutes and centers. Additionally, NLM's intramural researchers can collaborate on projects with outside academic partners, and partner with industry via technology transfer and research and development agreements.

The position of NLM Scientific Director offers an exciting opportunity for a creative, forward-thinking individual to develop a comprehensive vision for NLM's IRP and direct the implementation of that vision. The Scientific Director has overall budgetary and personnel authority for NLM's IRP; identifies and supports opportunities for new research directions and has overall

responsibility for the recruitment and career development of a diverse cadre of exceptional investigators, research fellows, and pre- and post-doctoral trainees. In addition, the Scientific Director is expected to carry out her/his own research program, conducting innovative research in the biomedical data sciences, supported by resources appropriate to the size and scope of the program.

The successful candidate will direct the activities of a diverse group of research investigators and trainees. In addition to having responsibility for the budget, staffing, quality and integrity of NLM's IRP, the Scientific Director is an active participant in the NIH Intramural Research Program, representing NLM at the Scientific Director's meetings, IRP committees, and in other groups within and external to NIH. The incumbent is the executive secretary of the NLM Board of Scientific Counselors and a member of the NLM Leadership team that advises the NLM Director.

LOCATION: Bethesda, MD

REQUIRED QUALIFICATIONS: The successful candidate will have a Ph.D, MD and/or equivalent degree and an established record of outstanding research accomplishments, scientific leadership and service within the community of scientists, health professionals, industry and others interested in the biomedical data sciences.

SALARY/BENEFITS: The NLM Scientific Director will be appointed at a salary commensurate with his/her qualifications and experience and NIH salary guidelines. Full Federal benefits will be provided, including

retirement, health and life insurance, long term care insurance, leave, and savings plan (401(k) equivalent). A recruitment or relocation bonus may be available, and relocation expenses may be paid.

EQUAL OPPORTUNITY EMPLOYMENT:

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, sexual orientation, national origin, political affiliation, marital status, disability, age or membership or non-membership in an employee organization. The NIH encourages the application and nomination of qualified women, minorities, and individuals with disabilities.

STANDARDS OF CONDUCT/FINANCIAL DISCLOSURE:

The NIH inspires public confidence in our science by maintaining high ethical principles. NIH employees are subject to Federal government-wide regulations and statutes, as well as agency-specific regulations described at <http://ethics.od.nih.gov/default.htm>.

We encourage applicants to review this information. The position is subject to a background investigation and requires the incumbent to complete a public financial disclosure report prior to the effective date of the appointment.

FOREIGN EDUCATION: Applicants who have completed part or all of their education outside of the U.S. must have their foreign education evaluated by an accredited organization to ensure that the foreign education is equivalent to education received in accredited educational institutions in the U.S. **We will only accept the completed foreign education evaluation.** For more

information on Foreign Education verification, visit the [National Association of Credential Evaluation Services \(NACES\)](#) website. Verification must be received prior to the effective date of the appointment.

REASONABLE ACCOMMODATION:

NIH provides reasonable accommodations to applicants with disabilities. If you require reasonable accommodations during any part of the application and hiring process, please notify us. The decision on granting reasonable accommodation will be made on a case-by-case basis.

HOW TO APPLY:

Applicants must submit a letter of interest of no more than three pages that addresses the applicant's: 1) vision for the NLM intramural's contribution to the field of biomedical informatics, information science and data science, 2) personal research plans for the next 3-5 years, and 3) qualifications for this position. In addition please include a current curriculum vitae, and the names of three references. Please include in your CV a description of your mentoring and outreach activities, especially those involving women and persons from racial/ethnic or other groups that are underrepresented in biomedical research. **DO NOT INCLUDE YOUR BIRTH DATE OR SOCIAL SECURITY NUMBER ON APPLICATION MATERIALS.**

Applications should be sent to: NLM SD Search Committee, c/o Troy Pfister NLMSD@nih.gov for the first review of applications by cob, Wednesday, September 15, 2021. The position will remain open until a selection is made.

<https://hr.nih.gov/jobs/search/executive/job-45121>

DHHS AND NIH ARE EQUAL
OPPORTUNITY EMPLOYERS

Reed College

Tenure-Track Faculty Position in Computer Science

Position Description

The Department of Computer Science at Reed College invites applications for an open rank tenure-track faculty position beginning in the fall of 2022. Applicants should have a Ph.D. in computer science or a closely related field by the time of the appointment and should be committed to excellence in undergraduate teaching and in research. The successful applicant will teach in the core computer science curriculum at all levels, will develop one or more courses in the applicant's area(s) of expertise, and will work to foster a welcoming and engaged community. They will maintain an active research program, ideally providing opportunities for student involvement, and they will advise several year-long senior thesis projects. Applicants from all areas of computer science are encouraged to apply.

Reed is a distinguished liberal arts college that offers a demanding academic program to approximately 1400 bright and dedicated undergraduate students. The college believes that cultural diversity is essential to the excellence of our academic program (see <https://www.reed.edu/diversity/>). Applicants to the position are encouraged to contact Adam Groce (agroce@reed.edu), the chair of the search committee, for further details about the position and the college's computer science program. Information

about the position is also posted at <https://www.reed.edu/computer-science/faculty-search.html>.

Application Instructions

Applicants should submit their applications electronically through the Interfolio service at <http://apply.interfolio.com/91565> and should include a cover letter, curriculum vitae, teaching statement, research statement, diversity statement, and three letters of recommendation. The cover letter should address how the applicant's teaching and scholarship would contribute to Reed's small, selective undergraduate environment. The diversity statement should address how the applicant can further the diversity and inclusivity of the computer science program.

Applications submitted by October 25, 2021 are guaranteed full consideration, although review of applications will continue until the position is filled.

An Equal Opportunity Employer, Reed values diversity and encourages applications from underrepresented groups.

Santa Clara University

Lecturers - Information Systems & Analytics (ISA)

Overview

The Information Systems and Analytics (ISA) Department of the Leavey School of Business at Santa Clara University invites applications for multiple lecturer positions in the areas of Information Systems, Analytics, and Operations.

Review of applications will begin immediately and continue until all positions are filled. Positions can start as soon as September 1, 2021.

Basic Qualifications

We see this specialization as falling at the intersection of information systems, business analytics, and operations management. Applicants should possess a foundation in these disciplines and deep expertise in one or more. Applicants must have a Ph.D. in Information Systems, Operations Management, Computer Science, Business Analytics, Statistics, or a related field.

Preference will be given to candidates who have demonstrated excellence in research and teaching, embrace the Silicon Valley spirit, and have the expertise or willingness to teach/develop various courses. In addition, we encourage applications from candidates who will contribute to the diversity of our college community, including members of historically underrepresented groups.

Responsibilities

Teaching graduate and/or undergraduate courses and fulfilling the responsibilities associated with those courses.

Providing suitable service to the department, university, profession, and/or community.



COMPUTER SCIENCE TENURE TRACK 2022-23

The Department of Mathematics, Statistics, and Computer Science at St. Olaf College invites applications for a full-time, tenure track position in Computer Science at the Assistant or Associate Professor level to begin August 2022.

We are looking for candidates who have a Ph.D. in Computer Science, or a closely related field, who can contribute broadly to our growing computer science program through teaching, research and supervision of undergraduate research. We will consider all areas of specialization, especially those that do not duplicate current faculty expertise in robotics, multi-agent systems, graphics, and computer vision. We expect that the successful candidate will also provide leadership in the program and a vision for the future as computer science continues to grow at St Olaf.

The department is particularly interested in applicants who can and will advance the college's goals for diversity, equity and inclusion. We request that in the letter of application, candidates address their potential to contribute to the St. Olaf community that maintains a diversity of people and perspectives as one of its core values. We strongly encourage applications from Black, Indigenous, and people of color and members of other underrepresented groups in accordance with our equity goals.

Position description and further details online at
<https://stolaf.hiretouch.com/faculty-postings>

Salary

Salaries are competitive and commensurate with qualifications and experience.

How to Apply

Applications must be submitted via https://wd1.myworkdaysite.com/recruiting/scu/scu/job/Santa-Clara-CA/Lecturers---Information-Systems---Analytics--ISA-_R1470

Santa Clara University

Tenure-Track Assistant Professors in ISA

Overview

The Information Systems and Analytics (ISA) Department of the Leavey School of Business at Santa Clara University invites applications for tenure-track positions beginning Fall 2022. These multiple positions are for the rank of assistant professor in the areas of Information Systems, Analytics, and Operations. Review of applications will begin immediately and continue until positions are filled.

Basic Qualifications

We see this specialization as falling at the intersection of information systems, business analytics, and operations management. Applicants should possess a foundation in these disciplines and deep expertise in one or more. Applicants must have a Ph.D. in Information Systems, Operations Management, Computer Science, Business Analytics, Statistics, or a related field.

Preference will be given to candidates who have demonstrated excellence in research

and teaching, embrace the Silicon Valley spirit, and have the expertise or willingness to teach/develop various courses. In addition, we encourage applications from candidates who will contribute to the diversity of our college community, including members of historically underrepresented groups.

Responsibilities

Maintaining a program of research leading to publications in high-quality journals.

Teaching graduate and/or undergraduate courses and fulfilling the responsibilities associated with those courses.

Providing suitable service to the department, university, profession, and/or community.

Salary

Salaries are competitive and commensurate with qualifications and experience.

How to Apply

Applications must be submitted via https://wd1.myworkdaysite.com/recruiting/scu/scu/job/Santa-Clara-CA/Tenure-Track-Assistant-Professors-in-ISA_R1468

Shanghai Artificial Intelligence Laboratory

(Full) Professor, Assistant Professor, Associate Professor

The Shanghai AI Laboratory seeks scholars from around the world for faculty positions in Artificial Intelligence in all ranks: Professor, Associate Professor, and Assistant Professor. The Laboratory will work on a number of frontier areas of AI, which include basic

Thriving university in robust Southwest Florida seeks innovative software engineering faculty

Three faculty positions available.

With Florida Gulf Coast University **experiencing double-digit enrollment increases and record high application volume**, this is an ideal time for innovative software engineering candidates to consider a move to Southwest Florida, where the economy is strong and poised for growth in the coming decade. **FGCU enjoys strong support from companies located in the region**, including Arthrex, CallMiner, Gartner and Lee Health as well as the real estate and hospitality industries.

The ABET-accredited Department of Software Engineering in the U.A. Whitaker College of Engineering seeks **three candidates to help meet the strong demand for graduates to work in software applications, cybersecurity and other computationally based industries** as we expand degree programs and collaborate with faculty in disciplines such as computer and information sciences, mathematics, statistics, bioinformatics, computational chemistry and others.

We are currently seeking the following:

- ▶ Two professors at the Assistant/Associate rank, each possessing a Ph.D. in software engineering, computer science, computer engineering or closely related field.
- ▶ One at the instructor (I or II) level, holding at least an M.S. in software engineering, computer science, computer engineering or closely related field.

Successful **candidates will teach, be involved in course and/or curriculum development**, take part in college and university committees and initiatives and engage in community service.

Help strengthen and expand the course of this burgeoning department located on **FGCU's lush 800-acre campus where sustainability is a primary focus**. A 125,000-square-foot LEED-certified classroom and lab building will open in the current academic year.

FGCU is a **regional university with more than 15,000 students and 500 faculty**. Situated in Southwest Florida between the Florida Everglades and the Gulf of Mexico, it offers an exceptional environment for living and learning. Half of the 800-acre campus is preserved in its natural state and all students complete a course in sustainability and an 80-hour community service requirement. Southwest Florida provides an exceptional quality of life with lush beaches, year-round recreational opportunities and a subtropical climate. The region offers an ideal environment in which to raise a family.

Anticipated starting date is January 2, 2022. This search will remain open until all positions are filled.

FGCU is an EOE AA M/F/Vet/Disability Employer.

To learn more and apply, visit:
fgcu.edu/hr/jobs-at-fgcu



theory, systems, and platforms, cutting-edge technologies, novel applications, as well as ethics and policy. We are now looking for candidates who are keen to innovate in these areas, renovate the research paradigms, or leverage AI technologies to transform the industry or our life. If you believe you are among the best in your chosen research field, you may wish to consider an exciting career opportunity at the Shanghai AI Laboratory.

The Shanghai AI Laboratory was officially unveiled at the World AI Conference (WAIC) in July 2020 and positioned as a national-level new-type research institute. Our vision is to build a world-class AI laboratory, with pioneering contributions to original theories and key technologies. By gathering top talents from around the world and creating a stimulating and collaborative research environment, the Laboratory aims to conduct original and influential research, make fundamental contributions to basic theories, significantly advance the state of the art, and create a remarkable impact on the industry, healthcare, and education.

Led by Professor Xiaou Tang, Professor Andrew Yao (Academician of CAS), Prof. Jie Chen (Academician of CAE), and other world-renowned scholars in AI, the Shanghai AI Laboratory has established strategic cooperation with Shanghai Jiaotong University, Fudan University, Zhejiang University, the Chinese University of Hong Kong, and other famous universities at home and abroad.

Location:

Shanghai, China

Application:

Please submit your application as a complete package, including all documents, in PDF format to hr@pjlab.org.cn.

More info:

<https://www.shlab.org.cn>

Southwestern University

Assistant Professor of Computer Science - Tenure Track

The Department of Mathematics and Computer Science at Southwestern University invites applications for a tenure-track Assistant Professor position in Computer Science beginning August 2022. Candidates must possess a Ph.D. in Computer Science or a related field. ABD candidates will be considered but the degree must be completed by August 14, 2022. Successful applicants will demonstrate a commitment to pursuing excellence in teaching a broad range of computer science courses (five courses per year) and a willingness to foster undergraduate research. Faculty are also expected to maintain a research program that results in peer-reviewed professional achievement, participate actively in university service, participate conscientiously in academic advising and retention initiatives, and exhibit a dedication to equity and inclusiveness. In line with Southwestern University's commitment to diversity, the department is especially interested in attracting candidates from underrepresented groups and/or those with a demonstrated

commitment to enhancing diversity, equity, and inclusion in STEM.

For more information visit apply.interfolio.com/89764.

EOE/M/F

State University of New York at Binghamton

Department of Computer Science

<http://cs.binghamton.edu>

The Computer Science Department at Binghamton University has one tenure-track assistant professor position beginning Fall 2022. Applicants should have a Ph.D. in Computer Science or related discipline, a strong research record, and a commitment to research and teaching. Qualified applications are invited from candidates with specializations in the areas of Artificial Intelligence (deep learning and NLP), Cybersecurity, Cloud Computing, and Software Engineering. Outstanding candidates in other systems areas will also be considered.

Further details and application information are available at:

<https://binghamton.interviewexchange.com/jobofferdetails.jsp?JOBID=135373>

Applications will be reviewed until the position is filled.

Binghamton University is an Equal Opportunity/Affirmative Action/Disability/Veterans Employer.

Texas Tech University

Assistant/Associate/Full Professor

The Department of Computer Science at Texas Tech University invites applications for multiple tenured or tenure-track positions at various ranks in any core and emerging area starting in Fall 2022.

Applicants must have a Ph.D. degree in Computer Science or related fields by the time of appointment. A record of excellence in scholarship with potentials to secure external competitive research funding, and a strong commitment to research and teaching at the undergraduate and graduate levels are required. Associate/Full Professor candidates must have proven record in building research teams at the university or national level, playing leading role in obtaining external research funding, and having internationally impactful publications. Service to the department, college, and university is expected. Duties include program enhancement, commitment to extra-curricular activities including services to diverse student populations and first-generation students. Applications from women and minorities are highly desirable.

A letter of application, Curriculum Vitae, statement of research, teaching statement, and three letters of reference (five for applications at the rank of full professor) should be submitted electronically at <http://www.texastech.edu/careers/> using requisition numbers 24922BR for an assistant professorship, 24923BR for an associate professorship, and 24925BR for a full professorship. Review of applications will start in September and will continue

until the positions are filled. For best consideration, applications should be submitted by October 31, 2021.

Texas Tech University is a Tier One Research University according to 2018 Carnegie Classification of Institutions of Higher Education. As an Equal Employment Opportunity/Affirmative Action employer, Texas Tech University is dedicated to the goal of building a culturally diverse faculty committed to teaching and working in a multicultural environment. We actively encourage applications from all those who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community at Texas Tech University. **We welcome applications from women, minoritized candidates, veterans, and persons with disabilities.** Texas Tech University recently surpassed the Hispanic student population threshold necessary for designation as a Hispanic Serving Institution (HSI).

Should you have questions, please contact: Dr. Yu Zhuang, search committee chair at cs.search@ttu.edu

University of Alabama at Birmingham

Teaching Assistant Professor/Instructor

The Department of Computer Science (CS) at the University of Alabama at Birmingham (UAB) is seeking candidates for a non-tenure-track assistant professor or instructor (teaching faculty) position, starting as early as Spring 2022.

Candidates with teaching expertise in all core computer science topics are sought, with preference given to Programming, Algorithms and Data Structures, Computer Architecture, Networking, Systems Programming, Operating Systems, Web-based Application Development and Software Engineering. UAB has made a significant commitment to teaching and teaching innovation in Computer Science. Candidates must consequently have strong teaching credentials preferably in a diverse range of areas and ability to advance the teaching strengths of the Department, including application of new results in CS education, establishment of new curricula and labs, online teaching, acquisition of educational grants, and participation in accreditation activities, student recruitment and advising.

The CS Department at UAB offers PhD, MS, BA and BS programs. The Department has a strong research focus, and a strong commitment to teaching, service and outreach. The PhD, MS, BA and BS enrollments are on the rise, with the goal of growing these programs significantly over the next several years. Research and educational funding are expanding significantly, and the Department plays a leadership role in Cyber Security and Data Science/Machine Learning/AI. Collaborations with UAB's medical enterprise are strong and growing, with many opportunities for faculty to participate in interdisciplinary work. For additional information about the Department, please visit: <https://www.uab.edu/cas/computerscience/>.

The University of Alabama at Birmingham (UAB) is a comprehensive urban university with the nation's third-largest public hospital, which has rapidly evolved into a world-renowned research university and health care center that ranks in the top ten nationally for student diversity. UAB is a Carnegie Level I research university. It has been consistently ranked highly, including being named the 2018 and 2019 Top Young University in the U.S. (top 10 worldwide, Times Higher Education World University Rankings), America's Best Large Employer (Forbes, 2021), and America's No. 4 Best Employer for Diversity (Forbes 2021). UAB is Alabama's single largest employer and an engine of revitalization for Birmingham. With a record enrollment of over 22,500 students, over 2,200 full-time faculty members, and a campus covering more than 100 city blocks, UAB is focused on the future of teaching, research, health care, and community service.

Birmingham is the largest city in Alabama, noted for its vibrant music scene, fine dining, warm weather, excellent schools, and a culture embracing diversity within driving distance to Atlanta, Memphis, Nashville, and New Orleans.

The College of Arts and Sciences (CAS) treasures the rich diversity of our student body and we are committed to their success. Members of the CAS community are expected to reflect our value for inclusive excellence in both our work and learning environment as well as in our efforts to serve and engage the community.

The candidate should have at least an MS, and preferably a PhD, degree in Computer



Assistant Professor - Finance Haas School of Business

The Haas School of Business at the University of California, Berkeley invites applications for a tenure-track faculty position in Finance with an expected start date of July 1, 2022.

For more information and to apply: <https://apptrkr.com/2388347>

Applications will be accepted through November 29, 2021.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: <http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>.

Science or a closely related field. Industrial experience is desirable but not required. Applications should include a cover letter, a curriculum vitae, a statement of teaching philosophy, a teaching portfolio with relevant materials (e.g., syllabi, teaching evaluations, homework/projects, teaching innovations), and at least two references. Interested applicants please follow this link to apply: <https://uab.peopleadmin.com/postings/9401>.

Review of candidates will begin immediately, and the search will continue until the position is filled. Preference will be given to applications received by October 15th, 2021.

UAB is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse, equitable and family-friendly environment in which all faculty and staff can excel and achieve work/life balance

irrespective of, race, national origin, age, genetic or family medical history, gender, faith, gender identity and expression as well as sexual orientation. UAB also encourages applications from individuals with disabilities and veterans. A pre-employment background investigation is performed on candidates selected for employment.

University of California, Merced

Assistant Professor in Computer Science & Engineering

The Department of Computer Science and Engineering at UC Merced seeks applicants for a tenure-track position at the Assistant Professor level beginning on January 1, 2022 or July 1, 2022. Priority will be given to candidates in the areas of: Artificial

Intelligence, Data Science, Machine Learning, and Deep Learning. However, exceptional candidates in all areas will be considered.

The Department seeks candidates who demonstrate both a record of outstanding scholarship and contributions to diversity, equity, and inclusion. We are particularly interested in attracting candidates who can contribute to the growing diversity and excellence of the community through their teaching, scholarship, and service.

Guidance on what to include in a diversity statement may be found here.

The position will remain open until filled. However, to ensure consideration, applications should be received by September 15, 2021.

Applications will be submitted via <https://aprecruit.ucmerced.edu/JPF01181>. Starting dates are negotiable. Inquiries and questions should be sent to csesearch@ucmerced.edu.

University of Chicago

Teaching Positions in Systems

The Masters Program in Computer Science (MPCS) in the Department of Computer Science at the University of Chicago invites applications for all ranks of the Clinical appointment (Assistant Clinical Professor of Computer Science, Associate Clinical Professor of Computer Science, and Clinical Professor of Computer Science) in the field of Computer Systems. The "Clinical" appointment is a full-time teaching-track position used in professionally-oriented

programs at the University of Chicago. It is unrelated to clinics in a medical sense.

This full-time, benefits-eligible appointment is for an initial three-year term, with the possibility of renewal. This is a teaching position with no research responsibilities, and a teaching load of six courses across three academic quarters of the year (Autumn, Winter, Spring).

The Masters Program in Computer Science offers a comprehensive and professionally oriented computer science education that combines the foundations of computer science with the applied and in-demand skills necessary for careers in technology. Our rigorous curriculum covers theory, programming, and applications and is targeted for students interested in tech careers in Software Engineering, Data Analytics, Product Management and Application Development.

Courses are held for nine weeks during each academic quarter, with the tenth week for a final project or exam. Instruction is expected to be primarily in person, but maybe remote due to the University's COVID-19-related health and safety protocols and associated requirements (once in-person instruction becomes the default mode of instruction, some classes may continue to use a remote or hybrid format).

The person holding this position must be able to teach at least two of the following courses: Introduction to Computer Systems, Advanced Computer Systems, Networks, Operating Systems, Distributed Systems, Parallel Programming, Compilers, Computer

Architecture, Introduction to Computer Security, or Functional Programming. Syllabi for past offerings of these classes can be found at <https://mpcs-courses.cs.uchicago.edu>. Depending on the applicant's background and interests, the person holding this position may also be asked to teach other classes in the MPCS.

For each clinical position/rank, applicants should have one of the following: a doctorate in Computer Science or a related field at the time of appointment; a masters degree and 4 years of relevant professional experience; or a bachelor's degree and 8 years of relevant professional experience. Work experience in a computing-related industry is preferred. In addition, each rank has the following requirements:

For the Assistant Clinical Professor of Computer Science position we require teaching experience in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant.

For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least six calendar years. 1800 units is typically equivalent to 18 quarter-long course offerings, or 12 semester-long course offerings. See <https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/> for equivalencies between teaching units and semester/quarter hours.

For the Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 3000 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least 10 calendar years; 3000 units is typically equivalent to 30 quarter-long course offerings, or 20 semester-long course offerings. See <https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/> for equivalencies between teaching units and semester/quarter hours.

Applications must be submitted online through the University of Chicago's Interfolio website:

Assistant Clinical Professor:
apply.interfolio.com/89795

Associate Clinical Professor:
apply.interfolio.com/89798

Clinical Professor:
apply.interfolio.com/89802

Review of applications will begin on August 5, 2021, and will continue until the position is filled.

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge, engagement, and exchange. The University's Statements on Diversity are at <https://provost.uchicago.edu/statements-diversity>.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination. (https://www.uchicago.edu/about/non_discrimination_statement/)

Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-1032 or email equalopportunity@uchicago.edu with their request.

University of Chicago

Teaching Positions in Software Engineering

The Masters Program in Computer Science (MPCS) in the Department of Computer Science at the University of Chicago invites applications for all ranks of the Clinical appointment (Assistant Clinical Professor of Computer Science, Associate Clinical Professor of Computer Science, and Clinical Professor of Computer Science) in the field of Software Engineering. The "Clinical" appointment is a full-time teaching-track position used in professionally-oriented programs at the University of Chicago. It is unrelated to clinics in a medical sense.

This full-time, benefits-eligible appointment is for an initial three-year term, with the possibility of renewal. This is a teaching position with no research responsibilities, and a teaching load of six courses across three academic quarters of the year (Autumn, Winter, Spring).

The Masters Program in Computer Science offers a comprehensive and professionally oriented computer science education that combines the foundations of computer science with the applied and in-demand skills necessary for careers in technology. Our rigorous curriculum covers theory, programming, and applications and is targeted for students interested in tech careers in Software Engineering, Data Analytics, Product Management and Application Development.

Courses are held for nine weeks during each academic quarter, with the tenth week for a final project or exam. Instruction is expected to be primarily in person, but maybe remote due to the University's COVID-19-related health and safety protocols and associated requirements (once in-person instruction becomes the default mode of instruction, some classes may continue to use a remote or hybrid format).

The person holding this position must be able to teach at least two of the following courses: Introduction to Software Engineering, Applied Software Engineering, Product Management, Object-Oriented Programming, OO Architecture: Patterns, Technologies, Implementations, Topics in Software Engineering, and User

Interface and User Experience Design. Syllabi for past offerings of these classes can be found at <https://mpcs-courses.cs.uchicago.edu/>. Depending on the applicant's background and interests, the person holding this position may also be asked to teach other classes in the MPCs.

For each clinical position/rank, applicants should have one of the following: a doctorate in Computer Science or a related field at the time of appointment; a masters degree and 4 years of relevant professional experience; or a bachelor's degree and 8 years of relevant professional experience. Work experience in a computing-related industry is preferred. In addition, each rank has the following requirements:

For the Assistant Clinical Professor of Computer Science position we require teaching experience in Computer Science or a related field at the undergraduate or graduate level, as either an instructor of record or a teaching assistant.

For the Associate Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 1800 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least six calendar years. 1800 units is typically equivalent to 18 quarter-long course offerings, or 12 semester-long course offerings. See <https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/> for equivalencies

between teaching units and semester/quarter hours.

For the Clinical Professor of Computer Science position, candidates must have been the instructor of record in at least 3000 units of undergraduate and/or graduate course offerings in Computer Science or a related field over the span of at least 10 calendar years; 3000 units is typically equivalent to 30 quarter-long course offerings, or 20 semester-long course offerings. See <https://registrar.uchicago.edu/records/transcripts/transcript-key/credit-conversion-chart-equivalencies/> for equivalencies between teaching units and semester/quarter hours.

Applications must be submitted online through the University of Chicago's Interfolio website:

Assistant Clinical Professor:
apply.interfolio.com/89803

Associate Clinical Professor:
apply.interfolio.com/89807

Clinical Professor:
apply.interfolio.com/89808

Review of applications will begin on August 5, 2021, and will continue until the position is filled.

We seek a diverse pool of applicants who wish to join an academic community that places the highest value on rigorous inquiry and encourages diverse perspectives, experiences, groups of individuals, and ideas to inform and stimulate intellectual challenge,

engagement, and exchange. The University's Statements on Diversity are at <https://provost.uchicago.edu/statements-diversity>.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination (https://www.uchicago.edu/about/non-discrimination_statement/)

Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-1032 or email equalopportunity@uchicago.edu with their request.

University of Colorado Denver

Clinical Teaching Track Assistant Professor or Instructor

The Department of Computer Science and Engineering in the College of Engineering, Design and Computing at the University of Colorado Denver invites applications for a non-tenure-track faculty position at the level of Instructor, Senior Instructor or Assistant Professor (open rank), Clinical Teaching Track. This position will be responsible for developing courses for the

new Bachelor of Arts in Computer Science to grow the curriculum.

The salary range for this position has been established at:

- Instructor CTT: \$60,000-\$80,000
- Senior Instructor CTT: \$60,000-\$80,000
- Assistant Professor CTT: \$70,000-\$100,000

For full details and to apply, visit <https://cu.taleo.net/careersection/2/jobdetail.ftl?job=21386&lang=en>

The University of Colorado Denver | Anschutz Medical Campus is committed to recruiting and supporting a diverse student body, faculty, and administrative staff. The university strives to promote a culture of inclusiveness, respect, communication, and understanding. We encourage applications from women, ethnic minorities, persons with disabilities, and all veterans. The University of Colorado is committed to diversity and equality in education and employment.

University of Florida

Lecturer Computer & Information Sciences & Engineering (76514)

Description

The Herbert Wertheim College of Engineering at the University of Florida invites applications for a 12-month, non-tenure track, full-time, position at the rank of Lecturer (Working title of Assistant Instructional Professor) in the Department of Computer & Information Sciences & Engineering (CISE).

The appointment will serve as both an instructor and the UF Online coordinator in the CISE Department with a dual focus as (1) instructor, working across the department and with the department leadership to ensure the department delivers excellent courses for UF Online students, and as (2) coordinator, serving as the CISE Department UF Online coordinator and in doing so, maintaining an organized and strategic set of curricular offerings so that UF Online students have the seats they need in high-quality courses to complete their UF Bachelor's degree in accordance with UF policies. To be successful, this Lecturer will serve as a liaison between the Chair of the Department of CISE, UF Online, and the Center for Online Innovation and Production (COIP). The candidate will have the opportunity to participate in department, university, and professional service activities. Candidates with experience or willingness to engage in activities that contribute to diversity and inclusion are especially encouraged to apply.

Job Qualifications

We seek outstanding candidates who have a Ph.D. in Computer & Information Sciences & Engineering or a closely related discipline. Applicants must have an outstanding record of academic and research accomplishments, a strong interest in undergraduate teaching in Computer & Information Sciences & Engineering, and a commitment to professional service (e.g., through participation in professional societies). The successful candidate will be expected to teach CISE undergraduate

courses, collaborate with faculty in and outside the department, and be involved in service to the university and the profession. Candidates with a master's degree in a closely related field of engineering and industrial experience may also be considered.

Instructions

The search committee will begin reviewing applications as soon as possible and will continue to receive applications until the position is filled. You must apply by submitting an application through Interfolio via <https://facultyjobs.hr.ufl.edu/>. (Job 76514) The application with attached PDF files of the following required documents: (1) a letter of interest, (2) a detailed curriculum vitae, (3) a statement of teaching philosophy and interests in teaching existing courses and developing new online courses at the undergraduate level, (4) a statement describing interest and experience in working with diverse groups and underrepresented populations, and (5) contact information of three or more references.

Final candidate will be required to provide an official transcript to the hiring department upon hire. A transcript will not be considered "official" if a designation of "Issued to Student" is visible. Degrees earned from an education institution outside of the United States are required to be evaluated by a professional credentialing service provider approved by the National Association of Credential Evaluation Services (NACES), which can be found at <http://www.naces.org/>.

The University of Florida is an equal opportunity institution dedicated to building a broadly diverse and inclusive faculty and staff.

The University of Florida is An Equal Employment Opportunity Institution. If an accommodation due to a disability is needed to apply for this position, please call 352/392-2477 or the Florida Relay System at 800/955-8771 (TDD). Hiring is contingent upon eligibility to work in the US. Searches are conducted in accordance with Florida's Sunshine Law.

The University of Florida is committed to nondiscrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information, and veteran status in all aspects of employment including recruitment, hiring, promotions, transfers, discipline, terminations, wage and salary administration, benefits, and training.

University of Illinois System - Chicago

Discovery Partners Institute

Research Scientist/Senior Research Scientist

The Discovery Partners Institute (DPI) empowers people to jumpstart their tech careers or companies in Chicago. Led by the University of Illinois System in partnership with some of the world's top research institutions, DPI does

three things centered around economic development: tech talent development for high-demand tech jobs; applied research and development; and building a stronger tech ecosystem. DPI prepares students and workers to step into high-demand tech jobs. It also builds research teams and matches them with new funding. With state investment and a new innovation district in development, DPI has the resources to attract, develop and leverage the most ambitious people and companies the region has to offer - and keep them here.

DPI invites nominations and applications for Research Scientists and Senior Research Scientists. These roles offer an extraordinary opportunity to help shape and drive one of DPI core missions: Research & Development. These positions bring together research initiatives by coalescing teams of faculty and scientists across institutions and disciplines. Research Scientists are principal contributors in developing specific research project requirements and are responsible for all aspects of the project from conception to finding funding through execution.

Research Scientists must demonstrate leadership, for example, as principal investigator, as head of a defined research project, or as key interstitial members of research teams. They must provide overall program/project leadership and management, conduct and publish self-initiated research, conduct research across programs or projects,

train and manage other researchers or staff, and participate in long-range research planning. Research Scientists are expected to work closely with both our internal R&D team members as well as the external members of our Science Teams. DPI is especially interested in supporting research that is relevant or provides economic benefit to the state of Illinois and has commercialization potential. Experience in commercialization is preferred.

Candidates must possess a Ph.D. degree in a computing-relevant field with a Minimum of four years of experience in managing a research program or team. (Seven years required for the Senior Research Scientist title). For the full position description and requirements, see the website below.

This is a full-time, 12-month Academic Professional position. For full consideration, candidates must apply and submit a letter of application, resume, and names/addresses/phone numbers of three professional references by **July 14, 2021** at <https://uajobs.hr.uillinois.edu/>.

The System Office conducts background checks on all job candidates upon acceptance of a contingent offer of employment. Background checks will be performed in compliance with the Fair Credit Reporting Act. The University of Illinois System requires candidates selected for hire to disclose any documented finding of sexual misconduct or sexual harassment and to authorize inquiries to current and former employers

regarding findings of sexual misconduct or sexual harassment. For more information, visit <https://www.hr.uillinois.edu/cms/One.aspx?portalId=4292&pageId=1411899>

System Human Resource Services
(312) 996-5130
erhr@uillinois.edu

The System Office is an affirmative action/equal opportunity employer dedicated to building a community of excellence, equity and diversity. The System Offices welcome applications from women, underrepresented minorities, individuals with disabilities, protected veterans, sexual minority groups and other candidates who will lead and contribute to the diversification and enrichment of ideas and perspectives.

The University of Iowa

Tippie College of Business

Tenure/Tenure-Track Faculty Position(s) in Business Analytics

The Position(s)

The award-winning Department of Business Analytics in the Tippie College of Business at the University of Iowa invites applications for one or more tenure-track faculty positions at the level of Assistant, Associate, and Full Professor starting August 2022. We are particularly interested in innovative scholars with a PhD degree entering or at the advanced Assistant Professor level, or the beginning Associate Professor level, and we are excited to consider a

broad range of fields within Analytics, including Applied Mathematics, Business Analytics, Computer Science, Industrial Engineering, Informatics/Information Sciences, Logistics, Management Science, Operations Management/Supply Chain, Statistics, or any related field. The successful candidate(s) will contribute to vibrant and growing programs at the graduate and undergraduate levels. Find more information and apply at <https://teach.tippie.uiowa.edu>.

Please submit your materials by using the University of Iowa online job application system at <http://jobs.uiowa.edu/jobSearch/faculty/>. Click on the listings for Tippie College of Business and select requisition 74232

University of Louisville

Postdoctoral Research Associate

The Computer Science and Engineering Department at the University of Louisville is seeking a Postdoctoral Research Associate to conduct research in computing systems, including but not limited to computer architecture, compiler, real-time and embedded systems, and/or hardware/software security. The candidate is expected to lead their own research projects, assist in writing proposals for external grants, and mentoring undergraduate/graduate students in research. The compensation will be competitive and commensurate with experience.

[Apply here.](#)

Job Id: 41668.

University of Michigan

Post-Doc in Natural Language Processing (NLP)

Position available immediately in the LAnuage Understanding and generatiON research (LAUNCH) group at the Artificial Intelligence Laboratory, CSE, U-M, Ann Arbor. Under the supervision of Dr. Lu Wang, PostDoc will have the opportunity to work on a wide variety of NLP topics including (but not limited to): language generation, summarization, sentiment analysis, argument mining, computational social science, dialogue analysis, representation learning, and multimodality.

Perform research, publish the results obtained, provide technical guidance on projects for graduate and undergraduate students, and assist in writing research proposals. Interested candidates should visit <https://web.eecs.umich.edu/~wangluxy/> for more information on the research group and current projects.

Ph.D. in CS or related fields, with a demonstrated interest in NLP is required. Submit a statement of interest, CV, two representative publications, and two contacts (one is a PhD advisor) who can provide references for the applicant. Must possess valid work authorization and pass a background screening if selected. Salary range - \$65,000-\$75,000.

The University of Michigan is an equal opportunity/affirmative action employer.

University of New Orleans

Assistant Professor Positions

The Department of Computer Science at the University of New Orleans invites applications for two tenure-track Assistant Professor positions starting in Spring 2022 or Fall 2022. Candidates with expertise in gaming, AR/VR, machine learning & AI, and big data are especially encouraged to apply. Preference will be given to candidates whose interests and expertise augment existing strengths and exceptional candidates in any relevant area will be given due consideration.

The department hosts two research centers – the UNO Cyber Center (UNOCC) and the Canizaro Livingston Gulf States Center for Environmental Informatics (GulfSCEI) – and places a strong emphasis on both research and teaching excellence. The city of New Orleans offers a rich and unique cultural experience and opportunities for non-traditional collaborations.

The successful candidate will be expected to offer a broad range of specialized courses in their area of expertise, supervise graduate students, develop a nationally competitive research profile, and secure external research funding.

A Ph.D. in computer science or a closely related field is required for appointment. Successful applicants must possess a record of research excellence and demonstrate strong teaching commitments to graduate and undergraduate courses.

Interested applicants are invited to submit a resume, three recommendation letters, teaching, research and diversity statements to:

https://ulsuno.wd1.myworkdayjobs.com/en-US/UniversityOfNewOrleans/job/New-Orleans-La/Assistant-Professor_R-000186

Applications will be reviewed on a rolling basis until the positions are filled.

UNO is an Equal Employment Opportunity/Affirmative Action institution committed to excellence through diversity. UNO will not discriminate based upon race, ethnicity, color, sex, religion, national origin, age, disability, genetic information, sexual orientation, gender identity or expression, pregnancy, marital status, military or veteran status, or any other status or classification protected by federal, state, or local law. All eligible candidates are encouraged to apply.

University of Richmond

Assistant, Associate or Full Professor in Computer Science

The University of Richmond Department of Mathematics and Computer Science invites applications for a full-time tenure-track position at the rank of Assistant, Associate or Full Professor starting in the 2022-23 academic year.

View full details and apply here: <https://richmond.csod.com/ats/careersite/JobDetails.aspx?site=1&id=2292>

University of South Florida

Tenure Track Faculty Positions (all ranks)

The University of South Florida invites applications for tenure-track positions at all ranks Computer Science and Engineering

Applications are invited for multiple tenure-track positions at all ranks in the Department of Computer Science and Engineering starting January or August 2022. Preference will be given to candidates in strategic research areas that have high funding potential from federal funding agencies including NSF, NIH, DARPA, etc. Candidates should have an established record of outstanding-quality research publications and a commitment for excellence in teaching. We expect successful candidates to contribute to our diversity and inclusion efforts. Candidates must have completed a PhD in computer science or a related discipline at the time of starting the position. Affiliation with the *USF Institute for Artificial Intelligence + X* and/or the *Institute of Applied Engineering* is possible for candidates with research areas that meet the institute needs. The Institute for AI + X is a university wide research and education center for AI with a focus on collaboration across disciplines. The Institute of Applied Engineering provides agile, best-value engineering solutions to enhance the performance, effectiveness and safety of its sponsors, including the Department of Defense; other federal, state and local agencies; and industry.

Computer Science and Engineering has 28 tenure-track/tenured faculty members, 12 instructors, 3 visiting assistant professors,

and 6 staff members/advisors, and offers BS, MS, and PhD degrees, serving over 2000 undergraduates, about 120 masters, and about 100 PhD students. USF CSE has a strong working relationship with [CyberFlorida](#). CSE ranks include twelve NSF CAREER awardees, one National Academy of Inventors (NAI) Fellow, three IEEE Fellows, three IAPR Fellows, three AAAS Fellows, and three AIMBE Fellows. USF CSE is in the top 10% of Computer Science departments in US public universities. This ranking is according to most recent Academic Analytics data based on Scholarly Research Index AAD2019 using default weights for grants, articles, conferences, awards, and citations. The Computer Engineering graduate program was ranked #52 among US public universities by US News and World Report (2021). USF CSE faculty members have 38 issued patents, own 6 copyrights, and have executed 13 license/option agreements between FY2016-FY2020.

The College of Engineering at the University of South Florida comprises seven departments, serving nearly 6,000 students and offers ABET-accredited undergraduate degrees in seven programs, as well as 12 master's and eight doctoral degrees. The College is ranked #55 among public universities in the USNWR 2021 Best Engineering Graduate Program Rankings. The College has 12 major research centers and institutes and is actively engaged in local and global research activities with a focus on sustainability, biomedical engineering, computing technology and transportation. For the fiscal year 2019-2020, the College had \$39 million in research expenditures



UPSTATE
University of South Carolina

Assistant Professor of Computer Science

FAC00085PO21

The University of South Carolina Upstate is a positive, diverse, and empowering institution for motivated, success-minded students who want to be challenged academically, supported personally, and pushed to the boundaries of their potential in an opportunity-rich environment. Because the University of South Carolina Upstate is proud of its student body, we seek to attract a diverse applicant pool.

USC Upstate seeks a tenure-track Assistant Professor of Computer Science beginning January 1, 2022, or August 16, 2022. The Division of Mathematics and Computer Science invites candidates with expertise in cyber security, computer security, and networking in particular, but candidates with expertise in other areas, such as cloud computing, software engineering, web development, and/or mobile development will also be considered. Applicants should be capable of teaching a wide variety of computer science course, have a strong commitment to teaching and good research potential. The Computer Science program at USC Upstate holds an ABET accreditation and faculty teach three course (9 credit hours) each semester. Various internal grants are available by the university to support both faculty and student research. In addition to teaching, other duties include developing curriculum, engaging in scholarly activities, advising students, and participating in internal and external service.

Minimum qualifications: Ph.D. in Computer Science or closely related field is required. ABD candidates with planned completion dates by December 31, 2021, for a January 1, 2022, start date or by August 15, 2022 for an August 16, 2022, start date may also be considered. Candidates should have the potential for excellence in teaching and the demonstrated ability to develop a successful research agenda. A successful background check is required.

Preferred Qualifications: Preference will be given to candidates with expertise in cyber security, computer security and networking.

For a complete job description and to apply, go to <https://aptrkr.com/2379630>

Contact information:

Dr. Wei Zhong
Division of Math and Computer Science
University of South Carolina
800 University Way, Spartanburg, SC, 29303
Email: wzhong@uscupstate.edu
864-503-5785

The University of South Carolina does not discriminate in educational or employment opportunities on the basis of race, sex, gender, gender identity, transgender status, age, color, religion, national origin, disability, sexual orientation, genetics, protected veteran status, pregnancy, childbirth or related medical conditions.

The University of South Florida is a high-impact global research university dedicated to student success. Over the past 10 years, no other public university in the country has risen faster in U.S. News and World Report's national university rankings than USF. Serving more than 50,000 students on campuses in Tampa, St. Petersburg and Sarasota-Manatee, USF is designated as a Preeminent State Research University by the Florida Board of Governors, placing it in the most elite category among the state's 12 public universities. USF has earned widespread *national recognition* for its success in graduating under-represented minority and limited-income students at rates equal to or higher than white and higher-income students. USF is a member of the American Athletic Conference. Learn more at www.usf.edu.

An application package should include a cover letter, curriculum vitae, statements describing research and teaching experience and goals, and the names and contact information of at least three references (one of which must be the current immediate supervisor of the applicant). Applicants must electronically submit the application packet as one PDF file to: <https://www.usf.edu/work-at-usf/careers>. For consideration, please apply to the appropriate position level (Assistant Professor, search Job ID #27778, Associate Professor, Search Job ID #27779, Full Professor, search Job ID #27780).

Applications will be considered starting immediately.

The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. Women and minorities are strongly encouraged to apply. Dual career couples with questions about opportunities are encouraged to contact the Department chair. To request disability accommodations in the application and interview process, please notify Khoa Dinh, the EOL Coordinator at (813) 974-9272 at least five working days in advance.

University of Toledo

Post-Doctoral Research Associate

We are looking for a highly motivated individual working as a postdoctoral research associate in the Department of Electrical Engineering & Computer Science at The University of Toledo to perform research in cyber-physical-human systems. The successful candidate will have opportunities to lead and develop research and scholarly programs with academic/industry partners and graduate/undergraduate students. This postdoctoral research associate will apply techniques in embedded systems, machine learning, augmented reality, and distributed computing in cyber-physical-human systems, such as intelligent mobility systems including autonomous vehicles. The initial appointment will be for one year and may be extended to multiple years. Compensation is commensurate with experience.

To apply: <https://utoledo.csod.com/ux/ats/careersite/6/home/requisition/3656?c=utoledo>

Washington University School of Medicine

Postdoctoral Research Associate - Radiation Oncology

Two postdoctoral research associate positions are available in the Department of Radiation Oncology, Washington University School of Medicine. These positions are supported by multi-year NIH research grants. The aims of the research projects are to develop novel algorithms and benchmark data libraries for medical image processing and deformable image registration. Strong skills in scientific programming, image processing, and deep learning are required. This position will provide an excellent opportunity for candidates to pursue career in medical imaging science.

Required Qualifications:

- Ph.D. degree in computer science, engineering, medical physics or a related field.
- Skills in scientific programming using MATLAB and Python.
- Track record of academic research and manuscript publication.

Prospective candidates should send a letter of intent and curriculum vitae to:

Deshan Yang, PhD, Professor
Washington University School of Medicine
yangdeshan@wustl.edu

Wesleyan University

Assistant Professor of Computer Science

The Department of Mathematics and Computer Science at Wesleyan University invites applications for a tenure track assistant professorship in Computer Science to begin in Fall 2021. We encourage candidates in all areas of Computer Science to apply, and especially encourage candidates who can contribute to the diversity (broadly conceived) of the department. The teaching load is three courses per year.

We will begin reviewing applications on Dec. 1, 2021.

Applications must be submitted online at <https://academicjobsonline.org/ajol/jobs/19001> where the full job description may be found.

Williams College

Assistant Professor and Open Rank Positions

The Department of Computer Science at Williams College invites applications for two faculty positions beginning July 1, 2022. One is a tenure-track position at the rank of assistant professor with a three-year initial term. The other is an open rank position with a preference for more advanced candidates. That position will have terms commensurate with prior experience.

We invite applications from all areas of computer science for both positions.

New faculty will join eleven current members of the department in supporting a thriving undergraduate computer science major at a top-tier liberal arts college. The Department of Computer Science offers a congenial working environment, an excellent and diverse student body, and state-of-the-art facilities supporting both teaching and research. Many opportunities exist for collaboration both within computer science and across disciplines. For more information about the department and faculty, please visit <http://www.cs.williams.edu>.

Qualifications

Candidates should have a commitment to excellence in both teaching and research, and candidates should, by September 2022, possess a Ph.D. in computer science or a closely related discipline. Successful candidates will teach a total of three courses during the academic year, along with associated labs.

Application Instructions

Applications should include a cover letter, curriculum vitae, teaching and research statements, and three letters of reference, at least one of which speaks to the candidate's promise as a teacher. The application materials should also address how the candidate's teaching, scholarship, mentorship and/or community service might support Williams' commitment

to diversity and inclusion. Application materials must be submitted electronically through Interfolio at <http://apply.interfolio.com/91229>. Materials may be addressed to Professor Stephen Freund, Chair, Department of Computer Science.

Completed applications received by November 15, 2021, will receive full consideration, and review of applications will continue until the positions are filled. The search committee plans to conduct video conference interviews with semi-finalists by the end December, followed by on-campus interviews with finalists in January. Please direct all correspondence to hire@cs.williams.edu. All offers of employment are contingent upon completion of a background check as described here: <https://faculty.williams.edu/prospective-faculty/background-check-policy/>.

Equal Employment Opportunity Statement

Williams College is a liberal arts institution located in the Berkshire Hills of western Massachusetts. The college has built its reputation on outstanding teaching and scholarship and on the academic excellence of its approximately 2,000 students. Please visit the Williams College website (<http://www.williams.edu>).

Beyond meeting fully its legal obligations for non-discrimination, Williams College is committed to building a diverse and inclusive community where members from all backgrounds can live, learn, and thrive.