2018 BOARD NOMINEE

Michael Franklin

Department Chair and Professor, Computing, Computer Science
University of Chicago

CRA
Computing Research Association

Awards and Honors and Year Received

- ACM Fellow 2005
- ACM SIGMOD Test of Time 2013 and 2004
- Liew Family Chair of Computer Science, U Chicago 2016
- Thomas M. Siebel Endowed Professor of Computer Science, UC Berkeley, 2012
- Outstanding Advisor, CS Graduate Student Assoc,, UC Berkeley, 2011

Involvement in CRA Activities

- CRA Board Member, 2015-Present
- Chair, Habermann Award Committee, 2015, 2016
- Co-Chair CRA Mentoring Workshop, 2017
- After dinner speaker, CRA Snowbird Conference 2014

Other Relevant Experience

- Member, NSF CISE Advisory Committee, 2015-present
- Member, Advisory Board, ACM SIGMOD, 2015-present
- Director, Algorithms, Machines and People Laboratory (an NSF CISE Expedition), UC Berkeley 2011-2016
- Committee Member, US National Academy of Sciences, Committee on Analysis of Massive Data Sets. 2010-2013.
- Co-Founder and CTO, Truviso Inc. (Acquired by Cisco), 2005-2012

Research Interests

Data Science, Data Analytics, Data Management, Distributed Systems, Computing Systems

Personal Statement

The CRA provides a vital service to the Computing Research community and to society through its many programs that inspire support of and involvement and investment in CS research and education. Its efforts for promoting diversity and inclusion for computing research and for training the next generation of thought leaders are crucial for our field. In this time of continued pressure on universities, research budgets and fact-based reasoning in general, its importance is even greater than before. I have been honored to serve on the CRA board since 2015 and would be honored to continue to do so.

Michael J. Franklin

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Professional Preparation

University of Wisconsin-Madison	Computer Science	Ph.D. 1993
Wang Institute of Graduate Studies	Software Engineering	M.S.E. 1986
University of Massachusetts at Amherst	Computer and Info. Science	B.S. 1983

Appointments

2016-Present	**Liew Family Chair of the Department of Computer Science**, University of Chicago
2016-Present	**Sr. Advisor to the Provost for Computation and Data**, University of Chicago
2017-Present	**Interim Director**, Computation Institute, University of Chicago
1999–2016	**Thomas M. Siebel Professor of Computer Science**, University of California, Berkeley. (Associate Professor 7/99-6/04, Department Vice Chair, 7/04-7/06, Professor 6/04-6/12)
2014-2015	**Chair**, Computer Science Division, UC Berkeley, **Associate Chair**, Dept. of Electrical Engineering and Computer Sciences, UC Berkeley.
2016-Present	**Adjunct Professor,** EECS Dept., UC Berkeley.
2011-Present	**Director**, Algorithms, Machines, and People Laboratory, (AMPLab) UC Berkeley.
2012-2014	**Consultant and Technical Advisor**, Cisco Systems, San Jose, CA
2013	**Visiting Professor,** Center for Cloud Computing and Big Data, East China Normal University, Shanghai, China
2005-2012	**Founding CEO and Chief Technical Officer**, Truviso, Incorporated, Foster City, CA (acquired by Cisco Systems, May 2012)
2004-2005	**Visiting Faculty Researcher**, Intel Research Laboratory, Berkeley, CA
2003	**Executive-in-Residence**, Mayfield Fund, Menlo Park, CA
2003	**Visiting Professor,** Hong Kong University of Science and Technology
1993–1999	**Associate Professor**, Dept. of Computer Science, Univ. of Maryland, College Park
1994-1997	**Invited Professor**, Project Rodin, INRIA, Rocquencourt, France. (summers)
1989-1993	**Graduate Research Assistant**, Dept. of Computer Science, Univ.of Wisconsin, Madison, WI
1986-1989	**Member of the Tech. Staff**, Microelectronics and Computer Tech. Corp. (MCC) Austin, TX
1983-1985	**Software Engineer**, Wang Laboratories Inc., Lowell MA

Selected Publications Related to the Current Proposal

1. D. Crankshaw, X. Wang, G. Zhou, M. Franklin, J. Gonzalez, I. Stoica, "Clipper: A Low-Latency Online Prediction Serving System", *Proc. USENIX Symposium on Networked Systems Design and Implementation (NSDI), pp* 613-627, January, 2017.
2. E. Sparks, S. Venkataraman, T. Kaftan, M.. Franklin, B. Recht, "KeystoneML: Optimizing Pipelines for Large-Scale Advanced Analytics", *33rd IEEE International Conference on Data Engineering, ICDE 2017*, San Diego, CA, pp 535-546, April 2017
3. E. Sparks, A. Talwalkar, D. Haas, M.J. Franklin, M.I. Jordan, T. Kraska, "Automating Model Search for Large Scale Machine Learning", *6th ACM Symposium on Cloud Computing (SOCC 2015)*, Hilo, HI, August, 2015, pp 368-380.
4. D. Haas, J. Wang, E. Wu, M. Franklin, "Clamshell: Scaling Up Crowds for Low Latency Data Labeling", *Proceedings of the VLDB*, vol. 9, no. 4, pp 372-383, October 2015.
5. B. Mozafari, P. Sarkar, M. Franklin, M. Jordan, S. Madden, "Scaling Up Crowd-Sourcing to Very Large Datasets: A Case for Active Learning", *Proceedings of the VLDB*, vol. 8, no. 2, 2014, pp 125-136. (presented at VLDB 2015, Aug 2015)

Other Significant Publications

1. S. Krishnan, J. Wang, M. Franklin, K. Goldberg, T. Kraska, "PrivateClean: Data Cleaning and Differential

Privacy", *ACM SIGMOD Conference (SIGMOD 2016)*, San Francisco, CA, pp. 937-951, June 2016.

2. Z. Zhang, K. Barbary, F.A. Nothaft, E. Sparks, O. Zahn, M. J. Franklin, D. A. Patterson, and S. Perlmutter, "Scientific Computing Meets Big Data Technology: An Astronomy Use Case", *3rd IEEE International Conference on Big Data*, Santa Clara, CA, October, 2015, 10 pages. **Invited for Fast Track Submission to IEEE Transactions on Big Data**
3. Trushkowsky, B., Kraska, T., Franklin, M., Sarkar, P., "Crowdsourced Enumeration Queries", 2*9th IEEE Intl. Conf. on Data Engineering*, Brisbane, Australia, April 2013, pp 673-684. (**Winner of the Best Paper Award and Invited as a CACM Research Highlights Paper**).
4. Zaharia, M, Chowdhury, M., Das, T., Dave, A., Ma, J., McCauley, M., Franklin, M., Shenker, S. and Stoica, I., "Resilient distributed datasets: A fault-tolerant abstraction for in-memory cluster computing", *NSDI Conf. 2012*. (**Winner of the Best Paper Award**)
5. P. Bailis, S. Venkataraman, M. J. Franklin, J. M. Hellerstein, I. Stoica: Probabilistically Bounded Staleness for Practical Partial Quorums. *Proceedings of the VLDB,* 5(8): 776-787 (2012) **(Selected for special issue of the VLDB Journal on Best Papers of VLDB 2012, Invited as a CACM Research Highlights Paper)**

Synergistic Activities

- **Technical Advisory Board Member** (selected): Alluxio, AtScale, ClearStory Data, DataBricks, Lab41, Silicon Valley Data Science, Splice Machine, Wise.io
- **Advisory Committee Member**, National Science Foundation, CISE Directorate, 2015-present.
- **Member, Board of Directors**, Computing Research Association, 2015-present.
- **Expert Task Group Member,** National Research Council, Transportation Research Board, SHRP2 Safety Data Implementation, 2014-present.
- **Committee Member,** Natll Academy of Sciences, Committee on the Analysis of Massive Data 2011-2013.

Collaborators

Recent Collaborators and Co-Editors: Wolfgang Lehner, (TU Berlin), Matei Zaharia (Stanford), Barzan Mozafari (U. Michigan), Hasso Plattner (HPI),, Jianhua Feng (Tsinghua U), Gaoliang Li (Tsinghua U.), Alan Fekete (U. Sydney), Tova Milo (Tel Aviv U.), Rean Griffith (VMWare), E. Wu (Columbia), R. Zadeh (Stanford), A. Talwalkar (UCLA), P. Bailis (Stanford), J. Hammerbacher (Mt. Sinai), R, Xin (Databricks), A. Ghodsi (Databricks).

Ph.D. Advisor: Michael Carey (UC Irvine)

Ph.D. and Postdoctoral Advisees: Donald Kossmann (Microsoft Research), Samuel Madden (MIT), Yanlei Diao (UMass Amherst/Ecole Polytechnique), Daisy Wang (U Florida), Justin Ma (Google), Tim Kraska (MIT), Michael Armbrust (Databricks), Shawn Jeffery (Google), David Liu (MacKensie and Partners), Sailesh Krishnamurthy (Amazon Web Services), Tolga Urhan (Oracle), Mehmet Altinel (Google), Demet Aksoy (UC Davis), Bjorn Jonsson (Reykajavik U), Laurent Amsaleg (INRIA/IRISA), Katherine Trushkowsky (Harvey Mudd College), Sirish Chandrasekaren (Dropbox), Gene Pang (Alluxio), Jiannan Wang (Simon Fraser U), J. Gonzalez (UC Berkeley), Evan Sparks (Amplify Partners)