Networking
Building Your Research Village

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&

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AT&T

Thursday, February 22, 2024, 9:15-10am
Rough Agenda

9:15  Welcome + our propaganda
9:35  Small group discussion
9:50  Q&A
10:00 Adjourn for break
Part Zero

WHO WE ARE
James Allan

- PhD Cornell 1995, with Gerard Salton
- UMass Amherst
  - Postdoc, 1995-1996
  - Research Faculty to 1998
  - Assistant Professor to 2003
  - Professor 2008
- Graduate Program Director
- Masters Program Director
- Chair then ADR, College of Information and Computer Sciences

- Research on search engine technology
  - Reviewer, conference PC chair, general chair...
  - Past Chair of SIGIR executive
<table>
<thead>
<tr>
<th>Time</th>
<th>Affiliation</th>
<th>Role</th>
<th>Topics</th>
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<tbody>
<tr>
<td>1987-1993</td>
<td>UW Madison</td>
<td>Ph.D.</td>
<td>Deductive DB</td>
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<td>1993-1999</td>
<td>Bell Labs → AT&amp;T Labs</td>
<td>MTS</td>
<td>Query processing, data integration</td>
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<tr>
<td>1999-2020</td>
<td>AT&amp;T Labs</td>
<td>Head: DB Research</td>
<td>+ data streams, XML, responsible data quality, privacy, explanation</td>
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<tr>
<td>2020-now</td>
<td>AT&amp;T CDO</td>
<td>Head: DB Research</td>
<td>+ responsible AI (... + unfair bias)</td>
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**Professional Activities, Awards**

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<thead>
<tr>
<th>Time</th>
<th>Role</th>
<th>Activities</th>
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<tr>
<td>1993-now</td>
<td>PC, GC, AE, Managing Editor</td>
<td>DB conferences, journals</td>
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<td>2011</td>
<td>ACM Fellow</td>
<td>For contributions to query processing</td>
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<tr>
<td>2018-2025</td>
<td>VLDB VP → President</td>
<td>Promote, exchange scholarly work in DB</td>
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<tr>
<td>2019-2025</td>
<td>CRA Board Member</td>
<td>Uniting industry, academia, government</td>
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<tr>
<td>2021-2025</td>
<td>ACM Pubs Board Co-Chair</td>
<td>Preferred publisher in computing</td>
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Part One

NETWORKING IN THEORY
Networking is ...

• Building and sustaining professional relationships
• Participating in a research community
Networking is *not* ...

- Using people
- A substitute for quality research
Examples of networking

- Moderate a newsgroup (or whatever it is “you kids” call them these days)
- Volunteer to do publicity or other jobs for major conferences
- Attend talks and meet with the speaker (do some homework on them)
- Serve when asked on NSF panels, National Academy studies, etc.
Networking ...

✓ Makes you known
✓ Makes your work known
✓ Source of new research ideas & different slants on old ideas
✓ Feedback on your research
✓ New collaborations
✓ Letters of recommendation
✓ Professional opportunities
It takes a village ... 

And you get to create your own.
Creating your own village

- All villages need elders
- All villages need regular Joes
- All villages need diversity
  - Learn different strokes from different folks
- All villages need uniformity
  - Similar folks have similar issues

John S. Davis, IBM, 2003
Mentorship vs Sponsorship

Mentorship
• Talking with you
• A sounding board
• Offers advice, skills, maybe a shoulder
• Mentors help you, but do not promote you
• They care about your success but that isn’t the same thing as being vested in your success
• You will need to navigate advice received from different sources -- mentors love giving advice!

Sponsorship
• Talking about you
• A sponsor is an advocate with influence – a champion!
• Typically senior and in your community chain
• They provide opportunities
• Vested in your progression (that’s both good and bad)
• Many successful folks have powerful sponsors and continue to benefit from them throughout their career
Networking up & down

- Go to talks, go to conferences, …
- Introduce yourself to
  - Established Researchers
  - Researchers in all areas!
  - Researchers junior to you
  - Peers!
Conference networking

Prepare a research talk (write it down, practice)
✓ "Elevator talk" (1 & 3 minute versions)
  ▪ Why is it an interesting problem?
  ▪ Why is it important?
  ▪ Why is your solution unique?
✓ Prepare
  Who will be there? Who do you want to meet?
  What do you want to ask them? Read their papers.

▪ Take notes! Who you met, plan next steps
At the Conference

✓ Don’t only hang around with your friends
✓ You all have CS in common
✓ Reconnect
✓ Make sure your nametag is visible
✓ Don’t interrupt private conversations
✓ Be open and ask questions
✓ Move on to the next conversation
✓ One conversation is not enough
✓ Find people you connect with
After the conference

✓ Follow up!
  ▪ Read their work! Send comments
  ▪ Send pointers to your related papers
  ▪ Share software and workloads
  ▪ Share/borrow teaching resources
  ▪ Do joint work together
  ▪ Invite them to give a talk
  ▪ Ask to give a talk there (as appropriate)
Informal networking

✓ At conferences, at meetings, at talks, in groups…
✓ Serendipity happens: Talk to people you meet by chance. Talk to people you like. Keep it simple.
✓ Convey excitement about your research and theirs.
✓ Talk to people about their lives as well as their work.
✓ Be authentic (“To thine own self be true …”)
✓ Ask questions & listen!
Part Two

NETWORKING IN PRACTICE
("TALK WITH STRANGERS?! WHAT?!")
But most of us feel we’re horrible at small talk!

You have Computing in common

Networking is not genetic

It is a research skill

Practice

Meet people  Learn  Go places

Volunteer!

Plus… we’ll give you a structure
Breakout discussion

- At your table
- 15 minutes
- Share networking, mentoring, supporting success and failures
  - As either a mentor or mentee

  - One person in the doc per table, please
What to talk about?

- Where are you in studying? Grad? undergrad?
- Why are you studying CS?
- What is your research area? What attracts you to this subject area?
- What research problem(s) are you working on right now?
- What is your greatest (professional or personal) challenge right now?
- What is your biggest concern about graduate school?
- What kind of career path do you want to pursue?
- What is your next step in your career?
- What do you hope to get out of this meeting?
- What was the most important lesson you learned from your advisor?
- What do you enjoy doing when you’re not doing CS?
- What are you passionate about?
I like your poster… um… how about this weather?
Homework

- Practice this week with your peers & beyond
- Meet at least 10 people in your institution this month
- Introduce yourself, smile, and mention your name
- Write down their names
- Network Forward – network your network
- Follow-up with email, Linked-In, or Facebook
- *Network Forward* Make connections “You should meet Hermione Granger from Hogworts…”
Part Three

COLLABORATIONS
Building & Managing Collaborations: How Have We Done It?

Let’s pick an easy one: author order on papers
Part Four

YOUR QUESTIONS
FROM THE DOC OR ASK AT MIC
(PLUS WE HAVE SOME EXTRAS IN RESERVE)
Some questions

• How to make connections that will be tenure letter writers
• How to network with potential tenure letter writers and maintain the relationship over years?
Some questions

• For your funded proposals, did you already have a good connection with the program director before submitting the proposal? If yes, can you suggest some specific and actionable ways to connect with program directors and, more importantly, maintain the connection?

• How to meet program managers and introduce ourselves?
Some questions

• Who should be in the networking group? Established faculty, industry practitioners?
Some questions

• How many people do you actively collaborate with? Did you pursue collaborations or did they happen more organically?
Some questions

• How to build it from the very start point if I am a really shy person?
• Networking with senior people seems intimidating. What are some useful suggestions?
• How do you get from just meeting someone once, and then they forget about you, to building a relationship (without doing a publication together)?
Some questions

- Should you ever not work with a colleague because they would be a perfect tenure letter writer for you?
- How much networking should I be doing? (i.e. How many visiting talks should I give a year? How many lunch/coffee dates at conferences?)
- What's a good "work within institution" vs. "work with other institutions" ratio? Is that important?
Some other questions

- What are some practical ways to start networking over conferences?
- Can you invite yourself to visit a colleague (to potentially start a research collaboration) and how do you do it?
- How to network with people from other disciplines?
- What are the different components that make a complete research village?
- How do we follow up with the people who said they’ll be research mentors? What concrete tasks do we ask them to do?
- How do you manage multiple research villages/conferences (especially for people that are interdisciplinary)?
- To maintain research networking, what are the most steps I need to do?
- Should I hire a postdoc?
- Is there any advice about collaborating for people who usually work self-contained and on-own-schedule?
- I understand one can build connections with other researchers via community services. But how would you maintain your whole research network when you know more and more people? Any specific and actionable suggestions?
Thank you!

And best of luck for an exciting career ahead of you in the CS research community!
Acknowledgements

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Vivek Sarkar

PhD Thesis: “Partitioning and Scheduling Parallel Programs for Multiprocessor Execution”
Advisor: John Hennessy

Research areas: Parallel computing, programming models, compilers, runtime systems, debuggers/verifiers

Senior Manager, Programming Technologies
Mentor: Fran Allen

ACM Fellow Citation: for contributions to technologies for parallel computing.

Member, DOE Advanced Scientific Computing Advisory Committee (ASCAC)

Member, CRA Board of Directors & Co-chair, CRA-Industry Committee

IEEE Fellow Citation: for contributions to compiler technologies for parallel computing and dynamic compilation

Professor & Chair, Department of Computer Science
E.D. Butcher Chair

Member, CRA Board of Directors & Co-chair, CRA-Industry Committee

IEEE Fellow Citation: for contributions to compiler technologies for parallel computing and dynamic compilation

Professor & Chair, School of Computer Science
Stephen Fleming Chair

Citation: For foundational technical contributions to the area of programmability and productivity in parallel computing, …