Acing the Tenure Track Job Search in Computer Science

A Comprehensive Guide to Every Step of the Journey

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Venue: Rochester Institute of Technology (Virtual)

September 06, 2024

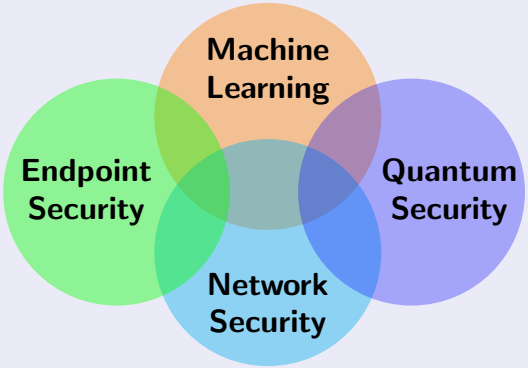
Agenda

1. About
2. IQSeC Lab
3. Job Postings and Timeline
4. Application Package
   - Cover Letter
   - Academic Resume
   - Research Statement
   - Teaching Statement
   - Diversity Statement
   - Letters of Recommendation
5. Interview Process
   - Zoom/Phone Screenings
   - Job Talk
   - On-Campus Interviews
   - Informal Interactions
6. Negotiation and Offer Evaluation
7. After-Offer Visits
8. Pitfalls and How to Avoid Them
9. Q&A

About Me

- RIT → MS in Cybersecurity (2018) and PhD in CIS (2024)

Research Interests



Industry Research

- Cisco Quantum Lab, Cisco
  - Quantum Security
- Nokia Bell Labs
  - Privacy Preserving ML
- Mandiant (now part of Google Cloud)
  - Malware Analysis

IQSeC Lab and Ongoing Research Projects

Intelligent and **Q**uantum **Se**cure Advanced **C**yber Defense Research (**IQSeC**) Lab

https://iqseclab.rahmanmsaidur.com/

ML and Endpoint Security

- Exact Replay-based Continual Learning
- Generative Replay-based Continual Learning
- Continual Learning for Concept-drift detection and adaptation
- Continual Machine Unlearning
- Explainable Continual Learning

ML and Network Security

- Voice-over-IP (VoIP) fingerprinting
  - Attacks and Defense
  - LLM
- LLM for Video Fingerprinting
  - Attacks and Defenses

Quantum Security

- Quantum Secure Wi-Fi
- Quantum Secure Satellite Communication
- Quantum Machine Learning for Cybersecurity

Agenda

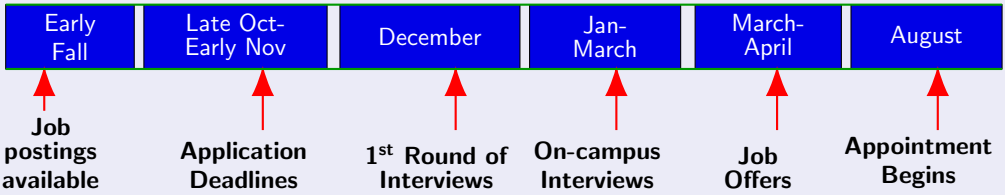
- Overview of the tenure-track job search process
  - Job postings and timeline
  - Preparing application package
  - Letters of recommendation
  - Interview Process
    - Zoom/Phone call screening
    - On-campus visit – job talk and many more 1-2 day long interview
    - Informal interactions
  - Negotiation and offer evaluation
  - Post-Offer
- Where things can go wrong?
- Being nice and open minded

Job Postings and Timeline

Job Postings

- CRA Jobs: https://cra.org/ads/
- HigherEdJobs: https://www.higheredjobs.com/
- Chronicle of Higher Education Jobs: https://jobs.chronicle.com/jobs/
- Academic Jobs Online: https://academicjobsonline.org/ajo/jobs
- University Career Sites

Timeline (may vary slightly)



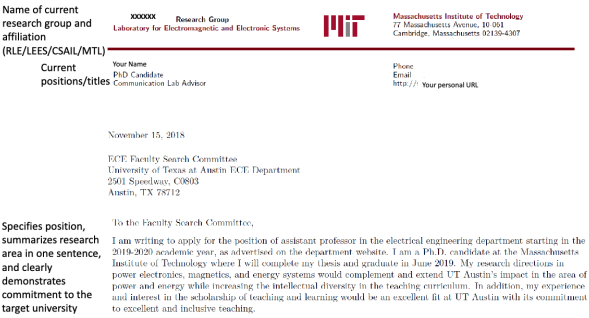
Elements of Application Package

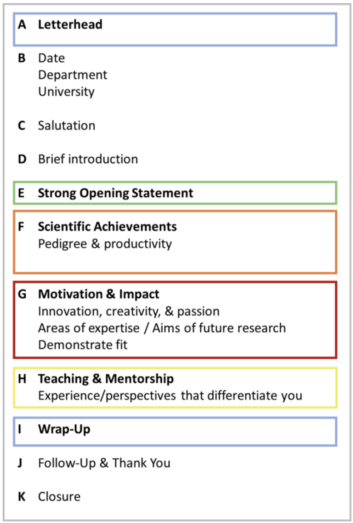
- Cover Letter
- Academic Resume
- Research Statement
- Teaching Statement
- Diversity Statement
- Leadership Statement (very rare)
- Transcripts (required for some schools)

Cover Letter

Resources

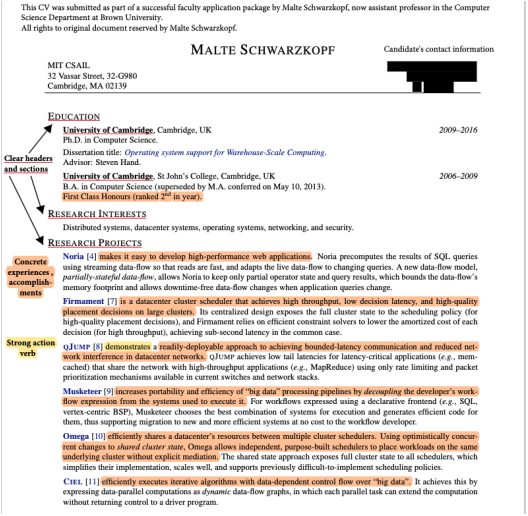
- MIT EECS Communication Lab
- Sample Cover Letter
- UPenn
- Chronicle of Higher Education





Preparing Academic Resume

- Name & Contact
- Research Interests
- Education
- **Publications**
- Research experience
- Teaching experience
- Student Advising
- Talks and Presentations
- Services → PC/ Reviewer(s)
- Awards & Grants
- News/Media Coverage
- Tailor to the position and institution
- MIT EECS Comm Lab Samples



This CV was submitted as part of a successful faculty application package by Malte Schwarzkopf, now assistant professor in the Computer Science Department at Brown University.
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MALTE SCHWARZKOPF

Candidate's contact information

MIT CSAIL
32 Vassar Street, 32-G980
Cambridge, MA 02139

[redacted]

EDUCATION

University of Cambridge, Cambridge, UK — *2009–2016*
Ph.D. in Computer Science.
Dissertation title: *Operating system support for Warehouse-Scale Computing*.
Advisor: Steven Hand.

University of Cambridge, St John's College, Cambridge, UK — *2006–2009*
B.A. in Computer Science (superseded by M.A. conferred on May 10, 2013).
First Class Honours (ranked 2nd in year).

Clear headers and sections

RESEARCH INTERESTS

Distributed systems, datacenter systems, operating systems, networking, and security.

RESEARCH PROJECTS

Concrete experiences, accomplishments

Noria [4] makes it easy to develop high-performance web applications. Noria precomputes the results of SQL queries using streaming data-flow so that reads are fast, and adapts the live data-flow to changing queries. A new data-flow model, *partially-stateful data-flow*, allows Noria to keep only partial operator state and query results, which bounds the data-flow's memory footprint and allows downtime-free data-flow changes when application queries change.

Firmament [7] is a datacenter cluster scheduler that achieves high throughput, low decision latency, and high-quality placement decisions on large clusters. Its centralized design exposes the full cluster state to the scheduling policy (for high-quality placement decisions), and Firmament relies on efficient constraint solvers to lower the amortized cost of each decision (for high throughput), achieving sub-second latency in the common case.

Strong action verb

QJUMP [8] demonstrates a readily-deployable approach to achieving bounded-latency communication and reduced network interference in datacenter networks. QJUMP achieves low tail latencies for latency-critical applications (*e.g.*, memcached) that share the network with high-throughput applications (*e.g.*, MapReduce) using only rate limiting and packet prioritization mechanisms available in current switches and network stacks.

Musketeer [9] increases portability and efficiency of "big data" processing pipelines by *decoupling* the developer's workflow expression from the systems used to execute it. For workflows expressed using a declarative frontend (*e.g.*, SQL, vertex-centric BSP), Musketeer chooses the best combination of systems for execution and generates efficient code for them, thus supporting migration to new and more efficient systems at no cost to the workflow developer.

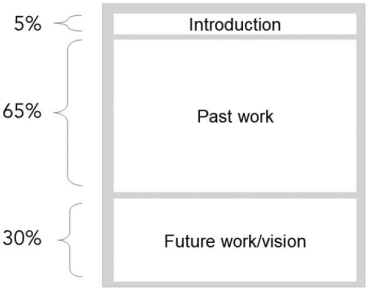
Omega [10] efficiently shares a datacenter's resources between multiple cluster schedulers. Using optimistically concurrent changes to *shared cluster state*, Omega allows independent, purpose-built schedulers to place workloads on the same underlying cluster without explicit mediation. The shared state approach exposes full cluster state to all schedulers, which simplifies their implementation, scales well, and supports previously difficult-to-implement scheduling policies.

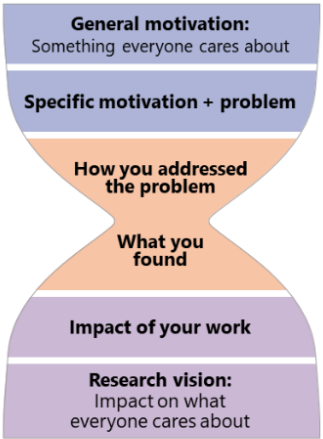
CIEL [11] efficiently executes iterative algorithms with data-dependent control flow over "big data". It achieves this by expressing data-parallel computations as *dynamic* data-flow graphs, in which each parallel task can extend the computation without returning control to a driver program.

"Tier 1 Papers are All You Need"

Research Statement

- Broader impact of your work
- Why is it an important problem?
- Interconnect breadth areas
- Communicate your **Brand**
- Include figures
- Max 5 pages w/ references
- MIT EECS Comm Lab Samples





Research Statement – Samples

This research statement was submitted as part of a successful faculty application package in 2018-2019 by Amy X. Zhang, now assistant professor at the Allen School of Computer Science & Engineering at the University of Washington.

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RESEARCH STATEMENT AMY X. ZHANG

High-level background

States a challenge that also serves as a motivation

Before diving into your results, tell who you are and what is your general goal.

Discussions online are integral to everyday life, affecting how we learn, work, socialize, and participate in public society. Yet the systems that we use to conduct online discourse, whether they be email, chat, or forums, have changed little since their inception many decades ago. As more people participate and more venues for discourse migrate online, new problems have arisen and old problems have intensified. People are still drowning in information, with few mechanisms for managing or synthesizing large volumes of discourse. Along with scale, users must now juggle dozens of disparate discussion silos, spread out across different apps and websites. Finally, an unfortunately significant proportion of this online interaction is unwanted, untrustworthy, or unpleasant, with clashing norms leading to back-and-forth bickering, people getting harassed into silence, and misinformation running rampant. Left unchecked, these problems have far-reaching harmful effects on our society.

Zooms in a bit with the background

Concluding motivation with "why one should care" point

My research in human-computer interaction is on reimagining outdated designs towards **building novel online discussion systems** that fix what's broken about online discussion. To solve these problems, I develop computational techniques and tools that **empower users and communities to have direct control over their experiences and information.** These include: 1) summarization tools to make sense of large discussions, 2) annotation tools to situate conversations in the context of what is being discussed, as well as 3) moderation tools to give users more fine-grained control over content delivery.

Easier to follow when numbered or itemized

In my work, I conduct in-depth qualitative inquiry and large-scale quantitative data analysis towards understanding issues that users have with online discussion, before developing new computational techniques that meet those user needs. Finally, I design, build, and deploy systems that use these techniques to the public in order to achieve real-world impact and to study their use by different communities. Given the public-interest nature of my work, I also pursue broader societal impact through outreach to industry and the public and collaboration and coalition-building with diverse parties. I have successfully collaborated with over 10 outside groups, including within industry, other universities, nonprofits, journalism groups, and civic organizations.

Illustrates breadth

This research statement was submitted as part of a successful faculty application package in 2017-2018 by Elena L. Glassman, now assistant professor of Computer Science at Harvard.

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Interactive systems for code and data demography

Elena L. Glassman

December 21, 2017

Tells who the candidate is

I am a researcher in **human-computer interaction (HCI),** I design, build and evaluate systems for code demography, i.e., comprehending and interacting with population-level structure and trends in **large code corpora**. These systems augment human intelligence by giving users a "useful degree of comprehension in a situation that previously was too complex."[1]

Discusses impact early on to catch readers' attention

In my doctoral and postdoctoral work at MIT and UC Berkeley, I have used *program analysis and synthesis techniques, interactive inference algorithms, visualization principles, and theories from cognitive science* to build systems that allow people to complete existing large-scale code-related tasks more quickly and answer new questions that were previously prohibitively time-consuming to investigate (Figs. 1 and 2). For example, OVERCODE (Fig. 3) is now deployed at UC Berkeley, where teachers give code composition feedback to more than 1500 students in a few hours.[2] EXAMPLORE (Fig. 4) allows programmers, API designers, and researchers to answer questions about how API methods are actually used in the wild.[3] Now, as a fellow at the Berkeley Institute of Data Science, I am exploring how to generalize these methods beyond code to help data scientists, social scientists, journalists, and other end-users more easily work with large amounts of data and communicate their intent to machines using concrete examples.

Shares a glimpse of the candidate's vision while introducing self

The conceptual key to my approach is defining *task-relevant abstractions* through data-driven (1) user-centered design or (2) inference algorithms. For example, I designed EXAMPLORE's abstract API skeleton to register and align hundreds of usage examples against each other so that users can get a high-level view of a corpus without sacrificing the ability to read concrete code. This design is supported by theories of human learning, such as analogical learning and Variation Theory: showing multiple aligned examples simultaneously helps induce accurate abstractions in the user's mind. In FIXPROPAGATOR, the abstractions are inferred from data: as a programming teacher begins to fix and give feedback on buggy student code submissions, the back end infers more general, abstract code transformations to propagate fixes and relevant teacher feedback to other buggy student code.[4]

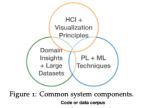


Figure 1: Common system components.

Figure 2: Common system architecture.

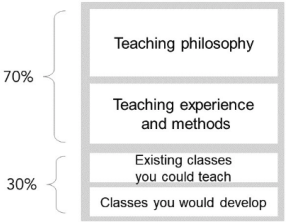
[1] D. C. Engelbart. Augmenting human intellect: A conceptual framework. *Stanford Research Institute. Retrieved March*, 1: 2007, 1962

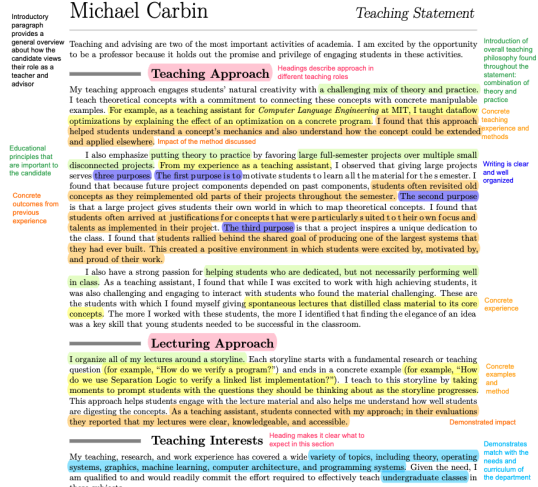
[2] E. L. Glassman, J. Scott, R. Singh, P. J. Guo, and R. C. Miller. Overcode: Visualizing variation in student solutions to

https://mitcommlab.mit.edu/eecs/commkit/faculty-application-research-statement/

Teaching Statement

- Teaching Philosophy
- Teaching Experiences and Practices
- Diversity and Inclusion
- Assessment and Feedback
- Advising and Mentoring Experiences and Approach
- Courses you are interested (to teach from the existing curriculum
- **Courses you would develop**




Michael Carbin — *Teaching Statement*

Introductory paragraph provides a general overview about how the candidate views their role as a teacher and advisor

Introduction of overall teaching philosophy found throughout the statement: combination of theory and practice

Teaching and advising are two of the most important activities of academia. I am excited by the opportunity to be a professor because it holds out the promise and privilege of engaging students in these activities.

Teaching Approach — Headings describe approach in different teaching roles

My teaching approach engages students' natural creativity with a challenging mix of theory and practice. I teach theoretical concepts with a commitment to connecting these concepts with concrete manipulable examples. For example, as a teaching assistant for *Computer Language Engineering* at MIT, I taught dataflow optimizations by explaining the effect of an optimization on a concrete program. I found that this approach helped students understand a concept's mechanics and also understand how the concept could be extended and applied elsewhere. Impact of the method discussed

Concrete teaching experience and methods

Educational principles that are important to the candidate

I also emphasize putting theory to practice by favoring large full-semester projects over multiple small disconnected projects. From my experience as a teaching assistant, I observed that giving large projects serves three purposes. The first purpose is to motivate students to learn all the material for the semester. I found that because future project components depended on past components, students often revisited old concepts as they reimplemented old parts of their projects throughout the semester. The second purpose is that a large project gives students their own world in which to map theoretical concepts. I found that students often arrived at justifications for concepts that were particularly suited to their own focus and talents as implemented in their project. The third purpose is that a project inspires a unique dedication to the class. I found that students rallied behind the shared goal of producing one of the largest systems that they had ever built. This created a positive environment in which students were excited by, motivated by, and proud of their work.

Writing is clear and well organized

Concrete outcomes from previous experience

I also have a strong passion for helping students who are dedicated, but not necessarily performing well in class. As a teaching assistant, I found that while I was excited to work with high achieving students, it was also challenging and engaging to interact with students who found the material challenging. These are the students with which I found myself giving spontaneous lectures that distilled class material to its core concepts. The more I worked with these students, the more I identified that finding the elegance of an idea was a key skill that young students needed to be successful in the classroom.

Concrete experience

Lecturing Approach

I organize all of my lectures around a storyline. Each storyline starts with a fundamental research or teaching question (for example, "How do we verify a program?") and ends in a concrete example (for example, "How do we use Separation Logic to verify a linked list implementation?"). I teach to this storyline by taking moments to prompt students with the questions they should be thinking about as the storyline progresses. This approach helps students engage with the lecture material and also helps me understand how well students are digesting the concepts. As a teaching assistant, students connected with my approach; in their evaluations they reported that my lectures were clear, knowledgeable, and accessible.

Concrete examples and method

Demonstrated impact

Teaching Interests — Heading makes it clear what to expect in this section

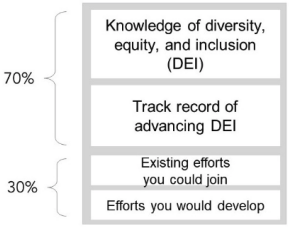
My teaching, research, and work experience has covered a wide variety of topics, including theory, operating systems, graphics, machine learning, computer architecture, and programming systems. Given the need, I am qualified to and would readily commit the effort required to effectively teach undergraduate classes in these subjects.

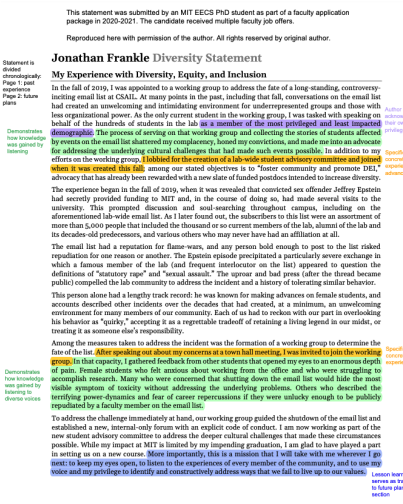
Demonstrates match with the needs and curriculum of the department

https://mitcommlab.mit.edu/eecs/commkit/faculty-application-teaching-statement/

Diversity Statement

- Commitment to Diversity
- Demonstrate experience with DEI
- Equity in Teaching and Research
- Inclusive Practices
- Impact and Reflection





This statement was submitted by an MIT EECS PhD student as part of a faculty application package in 2020-2021. The candidate received multiple faculty job offers.

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Statement is divided chronologically: Page 1: past experience Page 2: future plans

Jonathan Frankle Diversity Statement

My Experience with Diversity, Equity, and Inclusion

In the fall of 2019, I was appointed to a working group to address the fate of a long-standing, controversy-inciting email list at CSAIL. At many points in the past, including that fall, conversations on the email list had created an unwelcoming and intimidating environment for underrepresented groups and those with less organizational power. As the only current student in the working group, I was tasked with speaking on behalf of the hundreds of students in the lab as a member of the most privileged and least impacted demographic. The process of serving on that working group and collecting the stories of students affected by events on the email list shattered my complacency, honed my convictions, and made me into an advocate for addressing the underlying cultural challenges that had made such events possible. In addition to my efforts on the working group, I lobbied for the creation of a lab-wide student advisory committee and joined when it was created this fall, among our stated objectives is to "foster community and promote DEI," advocacy that has already been rewarded with a new slate of funded postdocs intended to increase diversity.

Demonstrates how knowledge was gained by listening

Author acknowledges their own privilege

Specific and concrete past experience with advancing DEI

The experience began in the fall of 2019, when it was revealed that convicted sex offender Jeffrey Epstein had secretly provided funding to MIT and, in the course of doing so, had made several visits to the university. This prompted discussion and soul-searching throughout campus, including on the aforementioned lab-wide email list. As I later found out, the subscribers to this list were an assortment of more than 5,000 people that included the thousand or so current members of the lab, alumni of the lab and its decades-old predecessors, and various others who may never have had an affiliation at all.

The email list had a reputation for flame-wars, and any person bold enough to post to the list risked repudiation for one reason or another. The Epstein episode precipitated a particularly severe exchange in which a famous member of the lab (and frequent interlocutor on the list) appeared to question the definition of "statutory rape" and "sexual assault." The uproar and bad press (after the thread became public) compelled the lab community to address the incident and a history of tolerating similar behavior.

This person alone had a lengthy track record: he was known for making advances on female students, and accounts described other incidents over the decades that had created, at a minimum, an unwelcoming environment for many members of our community. Each of us had to reckon with our part in overlooking his behavior as "quirky," accepting it as a regrettable tradeoff of retaining a living legend in our midst, or treating it as someone else's responsibility.

Among the measures taken to address the incident was the formation of a working group to determine the fate of the list. After speaking out about my concerns at a town hall meeting, I was invited to join the working group. In that capacity, I gathered feedback from other students that opened my eyes to an enormous depth of pain. Female students who felt anxious about working from the office and who were struggling to accomplish research. Many who were concerned that shutting down the email list would hide the most visible symptoms of toxicity without addressing the underlying problems. Others who described the terrifying power-dynamics and fear of career repercussions if they were unlucky enough to be publicly repudiated by a faculty member on the email list.

Demonstrates how knowledge was gained by listening to diverse voices

Specific and concrete past experience

To address the challenge immediately at hand, our working group guided the shutdown of the email list and established a new, internal-only forum with an explicit code of conduct. I am now working as part of the new student advisory committee to address the deeper cultural challenges that made these circumstances possible. While my impact at MIT is limited by my impending graduation, I am glad to have played a part in setting us on a new course. More importantly, this is a mission that I will take with me wherever I go next: to keep my eyes open, to listen to the experiences of every member of the community, and to use my voice and my privilege to identify and constructively address ways that we fail to live up to our values.

Lesson learned serves as transition to future plans section

https://mitcommlab.mit.edu/eecs/commkit/faculty-application-diversity-statement/

Letters of Recommendation

- Adviser
- And Who else?
  - Choose mentors (closely) familiar with your work
  - Your collaborators
  - Director/Manager from Industry (if you have worked with them)
- When to Request?
  - As early as possible in the application process
- How to Request
  - Get consent (either by email or verbally)
  - Communicate your estimated number of applications
  - It can be a lot of work
  - Recommenders are BUSY
  - Provide a clear timeline and materials
  - Highlight key achievements and goals
- Strengthening Your Case
  - Ask for specific examples and endorsements
  - Follow up with gratitude and updates

Overview of the Interview Process

- Zoom/Phone Screenings
  - You are **shortlisted candidates**
  - Presenting yourself professionally online
- On-Campus Interviews and Job Talk
  - You are in the pool of **Top 3-4 candidates**
  - Job talk structure: Introduction, Research, Future Work, Collaboration
  - Engage w/ different groups of people
  - Anticipate a variety of questions
  - Full-day itinerary: Meetings, Talks, Meals
- Informal Interactions
  - Meals with faculty: Be personable but professional
  - Conversations with student panels: Focus on teaching, research, and mentorship
- Keep yourself calm and relaxed (sometimes very hard)

Zoom/Phone Screenings

- **About** (2-3 mins)/ Elevator Pitch (will need for most of the steps)
  - Yourself and your research
- **Department and School**
  - Why are you interested in joining the academic unit?
  - Why this school?
  - What institutional issues particularly interest you?
  - How will you contribute to the community at our department and institution?
  - If you will get multiple offers, what will incite you to come to our university instead of another?
- **Research**
  - Specific one project in detail?
  - What is the broader significance of your research?
  - How do you see your research fitting in with the department? Collaboration at Department and School?
  - Funding Search? How do you plan to pursue external funding to support your research?
  - Which specific NSF programs will you submit to?
  - What do you want your research group/lab to be like? Number of students?
  - What is (are) your "home" conference(s)?
  - What are you looking for in your startup package?

Zoom/Phone Screenings

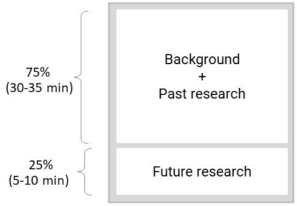
- **Teaching**
  - Teaching interests? $\rightarrow$ i) Among existing courses, and ii) Plan for new course(s) offering?
- **Diversity**
  - How do you address diversity in the classroom?
  - Diversity in Lab and research?
  - How do you approach mentoring students of minority and underrepresented groups?
- **What questions do you have for the search committee?** At this stage, keep your questions simple and general.
  - What is the teaching load, before and after tenure?
  - Is there any mentorship for junior faculty?
  - What kind of grant writing support is there?
  - What is the size of undergrad and grad classes?
  - Do I have any say on the course choices?
  - What kind of lab space will I be provided? Is it shared?
  - What has been your experience in recruiting students here?
- **Preparation Tips**
  - Test your tech setup in advance
  - Practice clear and concise answers
  - Prepare questions to ask the committee

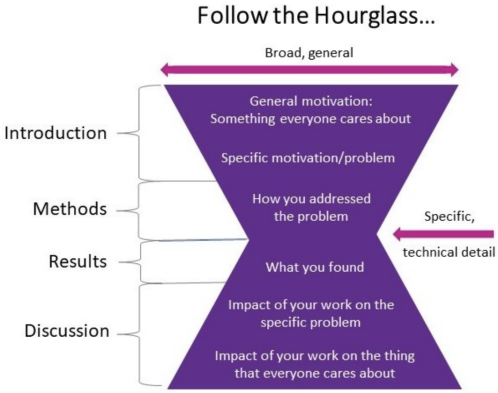
Zoom/Phone Screenings

- **Preparation**
  - Keep separate docs for each of the schools
  - Write draft answers beforehand
  - Practice, Practice, and Practice
  - Test your camera, lights, microphone
  - Remember the names of your committee members
  - Explore the work of the department and college
  - Who can be your collaborators?
- **During interview**
  - Wear comfortable cloths but be formal
  - Keep your drafts open in a separate monitor (or side screen)
  - Be mindful of time and avoid rambling
  - Maintain good posture and eye contact
  - Be nice and courteous

Job Talk

- Choose content that covers your most exciting and impressive research
- Choose a structure that highlights your content
- Practice your job talk many times, at many stages, and with many people
- Prepare and practice for Q&A
- Less Texts and More visualizations
- Time split (45 mins) $\rightarrow$ 34 mins current work + 6 mins future work + 2 mins collab + 2 mins grant proposal + 1 min teaching
- MIT EECS Comm Lab Samples





https://mitcommlab.mit.edu/eecs/commkit/faculty-job-talk/

Job Talk

- Structure and Content
  - Clear and logical flow: Introduction, Main Findings, Future Work
  - Limit text; emphasize visuals (graphs, charts, diagrams)
  - Include a slide summarizing key contributions
- Common Mistakes
  - Overloading slides with text or data
  - Ignoring the audience's background knowledge
  - Rushing through the talk or finishing too early
- Fundamental Slides to Include
  - Research Overview and Motivation
  - Methodology and Key Findings
  - Broader Impact and Future Directions
- Importance of Q&A
  - Engage with questions thoughtfully
  - Demonstrate flexibility and depth of understanding
  - Use Q&A to clarify and reinforce key points

On-Campus Interviews

- **Department Faculty** (Individual/Group)
  - Discuss research synergies and collaboration potential
  - Prepare to explain your future research directions
  - What are the strengths and weaknesses of the program?
  - What are the challenges currently facing the department or program?
  - Do you do collaborative research with other faculty members, either in this department or in other departments?
  - What is the expected course load? Number of advisees?
  - What are the students in the program like? How are they selected/recruited?
  - What have your graduates gone on to do?
  - What do you like best about working here?
  - What are the areas of conflict in the department?
  - How is the conflict handled?
  - What are the support services like (e.g., secretarial assistance, teaching and research assistants, travel monies, field trip logistics)?
  - What do you do for enjoyment?

On-Campus Interviews

- Interview with **Department Chair**
  - Highlight your teaching and service contributions
  - What are the strengths and weaknesses of the department? The institution?
  - Is the administration supportive of the department and its program?
  - What are the immediate needs of the department(s)?
  - How do you see me fitting into those needs?
  - Where do you see this department five years from now?
  - What are the relationships like among the various departments in the college/university?
  - How are departmental decisions that affect the faculty made?
  - What behaviors are valued in this department?
  - What are the procedures for promotion and tenure?
  - What other resources are available, such as research assistants, teaching assistants, computer services, research space, and administrative assistance?

On-Campus Interviews

- Interview with **Search Committee**
  - Where is the committee in the job selection process?
  - How many people are you bringing to campus?
  - What is your timetable for making a decision?
  - When can I expect to hear from you?
  - How did this position become open?
  - Who was in this position previously? Why did they leave? What did this previous person do well in their job? What do you wish he/she had done differently?
  - What does the work load consist of in terms of courses, advisees, etc.?
- Meeting with **Dean, Associate Dean, or Director**
  - Discuss institutional support and career growth
  - Inquire about strategic initiatives and priorities
  - How do you perceive the department in relationship to other departments in the college/university?
  - How do you perceive the college in relationship to other colleges in the university?
  - Five years from now, where would you like to see the college? The department?
  - What are the strongest departments on campus? The "up and coming" departments? What do they do particularly well?
  - At a publicly-funded institution: What is the legislative atmosphere in the state regarding funding for higher education?
  - How does this state compare with other states in terms of funding for higher education?

On-Campus Interviews

- **Student Panel**
  - Focus on teaching philosophy, student engagement, research resources
  - Be prepared to discuss mentorship experiences
- **Common Mistakes**
  - Not preparing specific questions for each group
  - Being overly formal or too casual in different settings

Informal Interactions: Meals and Beyond

- Breakfast, Lunch, and Dinner Conversations
  - Maintain a balance between professionalism and friendliness
  - Be prepared to discuss non-work-related topics, such as hobbies or family
- Questions to Prepare For
  - Why are you interested in our institution?
  - How do you see yourself fitting into our community?
  - What do you enjoy outside of work?
- Utilize this opportunity
  - Stay relaxed and be yourself
  - Use these opportunities to gauge departmental culture
  - Show interest in your colleagues' work and experiences

Negotiation and Offer Evaluation

- Understanding the Offer
  - Key components: Salary, Startup Package, Teaching Load
  - Institutional resources and support
- Negotiation Strategies
  - Prioritize your needs and goals
  - Be prepared to discuss startup funds, lab space, and spousal accommodations
- Comparing Offers
  - Consider institutional type: R1-Public, R1-Private, R2
  - Evaluate long-term career prospects and fit

Negotiation and Offer Evaluation

- Salary Benchmarks
  - Use Taulbee Survey data for negotiation
  - Consider cost of living adjustments
- Key Elements to Negotiate
  - Summer salary, research funds, lab space
  - Teaching load and service expectations
- Startup Package Breakdown
  - Equipment, computing resources, student support
  - Travel funds, conference participation, publication costs
- Salary Types and Expectations by Institution
  - Differences between R1-Public, R1-Private, R2-Public, R2-Private
  - Understanding tenure timelines and promotion criteria
- Common Pitfalls in Negotiation
  - Focusing too narrowly on salary alone
  - Accepting the first offer without countering

Preparing for After-Offer Visits

- Purpose of After-Offer Visits
  - Finalize negotiations and see facilities
  - Meet potential colleagues and collaborators
  - Real state visit
- Key Considerations
  - Clarify expectations and timelines
  - Assess the community and local environment
- Final Decision-Making
  - Weigh all factors: Professional and personal
  - Discuss with your adviser, mentors, friends who went through similar processes
  - Trust your instincts and commit confidently

Common Pitfalls and How to Avoid Them

- Overlooking Fit
  - Ensure your goals align with the department's vision
  - Research the institution thoroughly
- Undervaluing Negotiation
  - Don't hesitate to negotiate – know your worth
  - Be strategic, **not just focused on salary**
- Handling Rejection
  - Stay resilient and seek feedback
  - Use rejection as a learning opportunity

Where Things Can Go Wrong

- Inadequate Preparation
  - Rushed application materials
  - Lack of practice for interviews
- Misalignment with Institution
  - Poor fit between your research and department needs
  - Misunderstanding the institutional mission
- Overconfidence or Underselling
  - Overestimating strengths, underpreparing
  - Failing to highlight key achievements

What Are Red Flags

- Lack of Transparency
  - Vague or unclear job descriptions
  - Evasive responses to questions about resources
- High Turnover Rates
  - Frequent faculty departures
  - Short tenures of previous holders of the position
- Misalignment with Values
  - Conflicting research directions
  - Limited support for diversity and inclusion

More Resources

- Shomir Wilson's CS Job Market Guide
- Matt Might's job market post

Thank you!
Questions?