

My primary motivation for remaining in academia is my love of mentoring. While I could continue to conduct innovative systems research in industry, that setting would not allow me to engage my passion for long-term student mentoring. I have advised three undergraduates in the past, each for more than a year; they are now graduate students at MIT, CMU and Cornell. I have also worked closely with many younger graduate students while completing my PhD. Given those experiences, I am now ready to undertake the challenges of guiding students through their entire PhD.

**Mentoring Approach.** I use a task-based approach to mentoring: I assign tasks to students, touch base with them on each task, and revise the list as necessary. The granularity of tasks and frequency of revisions depend on the student, e.g., a younger student might require daily discussions with more fine-grained tasks, which become less frequent and broader-scoped as the student gains experience. This approach ensures that potential problems are caught early and discussed before they block the student's progress. For example, my first undergraduate advisee was a co-op intern at VMware, who helped with my research on checkpointing virtual machines. He was a sophomore when he started, so we wrote a task list on our whiteboard and reviewed it at the beginning of each day. Another undergraduate worked with me for two summers on the Sapphire platform for mobile/cloud applications. He started as a junior and had already taken several senior-level classes, so we discussed his goals weekly and left them at a high level. For example, he successfully implemented Paxos in the Sapphire framework in 4 uninterrupted weeks. In each case, I adapted my mentoring to the student's experience, and both undergraduates thrived while working with me.

**Teaching Approach.** I have been dedicated to teaching and tutoring for the last 10 years. I worked as a lab assistant and tutor while an MIT undergraduate and an UW graduate student. I tutored a wide range of classes, including classes for non-CS majors and systems classes at every level, from sophomores to graduate students. At MIT, I served as a teaching assistant for Introductory Digital Systems (6.111) and graduate Operating Systems (6.828) classes and received one of their highest ratings for a TA (6.3/7.0).

For two quarters at UW, I was a teaching assistant for the senior-level Distributed Systems class (CSE 452). Teaching distributed systems was particularly rewarding because I led sections of 35 students and gave three lectures to 70 students. I taught challenging topics (e.g., Paxos, distributed transaction protocols, and distributed caching) in an interactive environment, letting students propose failure modes and correctness conditions. A highly rated teaching assistant and lecturer (4.6/5.0), I received comments such as, "Really great, knowledgeable lecturer"; "I hope you become a professor!"; and "I enjoyed how you sometimes laugh at your own jokes." Further, I received an honorable mention for the Bob Bandes TA award, a department-wide award for the best TA.

Going forward, I am excited to continue teaching distributed and operating systems classes, or developing new classes at both the undergraduate and graduate levels. Like many systems researchers, I believe that building systems is the best way to learn about them. Accordingly, my past teaching experience includes classes that all had a significant lab component. I would enjoy developing a new class in mobile/cloud systems with a set of programming labs that cover new technologies (e.g., Firebase, Amazon Lambda).

**Outreach.** I have consistently been involved in outreach activities throughout my career. The highlight of my graduate career was the establishment of an annual **Women's Research Day** at UW CSE. We invite women computer science researchers from the area – including UW faculty and researchers from Microsoft Research and the Allen Center for AI – to give technical talks to an audience of undergraduate and graduate women. The day focuses on technical discussions in a supportive environment, not on specific women's issues. Our primary goal is to provide research role models for younger women and to show the breadth of computer science research. I started the event and organized it for the last two years; it is now run by a committee of undergraduate and graduate CSE women. I would enjoy establishing a similar event at other institutions and continuing to connect to women at all stages of their careers.