

I look forward to the teaching and mentorship opportunities that a faculty position will afford and demand. I have a strong record of teaching both as a TA and as an instructor, and I have experience with mentorship in both formal and informal mentoring relationships.

**Teaching** I am interested in and qualified to teach courses across programming languages and systems. Most of my classroom experience has been in systems. In undergrad, I twice TAed for the operating systems course at CMU ([15-410](#)) which involved teaching sections, holding office hours, and one-on-one assessments of large student projects (unix-like kernels). In grad school, I TAed the intro to systems course at UW ([CSE 351](#)). I particularly have enjoyed teaching systems courses, as they demystify computing perhaps more than any other kind of course. A good systems course approaches the computer as both a static artifact and the dynamic product of human design, thereby covering both the “what” and the “why” of a computer system, the latter of which can be a useful lens through which to understand the former.

My primary teaching experience was in 2019 as a co-instructor (with my PhD advisor Luis Ceze) for [CSE 351](#). The course is required for all CS majors, and our instance had over 150 students, most of whom were second-year undergraduates. We covered topics including the representation of data in memory, introduction to C and x86 assembly programming, virtual memory, memory allocation, the interface to the operating system, and so on. I gave half of the lectures; Luis gave the other half. We likewise split the preparation of homework assignments and exams. Our course evaluations were positive, yielding an median score of 4.5 out of 5.0.

My experience as an instructor gave me invaluable exposure to not only the visible parts of teaching such as lecture and office hours, but also components entirely new to me like the coordination of TAs. I also worked individually with several students in extenuating circumstances who required extra time or accommodations to complete the course.

My formal teaching experience lies mostly within the traditional “sage on a stage” model; I have not yet had the opportunity to teach other formats. However, I am committed to learn and try more modern techniques as I continue to teach and mentor.

**Mentorship** I have experience with mentorship in both formal and informal settings. Formally, I took part in UW CSE’s departmental mentoring program that pairs incoming PhD students with their senior colleagues. I have been a [SIGPLAN-M](#) mentor for two years, as part of which I have mentored four students ranging from high school to PhD students midway through their programs. I have also taken leadership roles in the creation of new mentorship programs. I co-organized the inaugural UW CSE Pre-Application Review Service, in which current PhD student mentor undergrads through the application process for PhD programs.

Outside the classroom, I am especially passionate about technical mentorship. My own success in research has hinged on strong technical software engineering skills that are rarely learned in the classroom. Instead, these critical skills are often learned via osmosis from colleagues or from being submerged in “hacker” culture. The informal nature of acquiring these skills can be a major barrier to success for many students, especially those from non-traditional backgrounds.

As a senior PhD student and a postdoc, I have mentored many students ranging from high school to PhD students. Many of my undergraduate mentees are now PhD students, and several are from underrepresented groups in computing. In these mentoring relationships, I regularly set aside time to build the students’ technical skills, including pair programming and code reviews. I have also mentored students in the other components of research including writing and editing papers and creating talks. In the 2021 PLDI SRC (a student research competition at a top PL conference), two of my undergraduate mentees tied for first place with totally unrelated research projects! One of them, Yihong Zhang, went on to place second in the world-wide ACM SRC Grand Finals.