My experience TAing, teaching, and mentoring has shown me the power and responsibility educators have to **encourage creative, ethical, and critical thinking** in our students. For that reason, I made teaching and mentoring undergraduates and junior students a significant priority during my PhD at the University of Washington's (UW) Allen School of Computer Science & Engineering. As a professor, I will continue my efforts to be an effective teacher and mentor, following inclusive and evidence-based practices.

Teaching & Lecturing

During my PhD, I took on several responsibilities related to teaching and lecturing, including being a teaching assistant (TA), a guest lecturer, and an instructor for a conference tutorial.

Classroom instruction — While I TA'ed several classes during my undergraduate program, my first teaching experience was TA'ing and teaching **biweekly section** for UW's undergraduate NLP course in 2016.[1] Because this was the iteration of this course, I took the initiative to go beyond my TA responsibilities and **designed some of the homework assignments** with Prof. Choi, which required writing starter code, assembling data sets, and setting up grading rubrics. Additionally, I **designed and created all my section materials**. I was happy to see my effort recognized in the very positive teaching evaluations.

Conference tutorial — Recently, I **co-taught a 1000-attendees commonsense tutorial** at the ACL 2020 virtual conference [1]. While designing my material for this tutorial, I focused on distilling my research expertise into a format accessible to graduate students, professors, and industry practitioners. This tutorial is available online and has since garnered over 2,500 views.

Invited lectures — I have also given several technical lectures to large audiences, listed below (with select links to recordings):

- **five invited talks**: Stanford, Berkeley, and Georgia Tech NLP seminar; NLP with Friends; QueerInAI workshop at ICML 2019
- **seven conference talks**: EMNLP, ACL (1), ACL (2) 2020; AAAI, EMNLP, ACL 2019

Teaching plans I look forward to acquiring more teaching experience, for example, by teaching natural language processing (NLP), ethics in artificial intelligence (AI), machine learning (ML), or computational social science. To prepare, I have been **attending UW's computer education seminar** to learn best practices from computer education (CSEd) research [e.g., *active learning*, *peer instruction*; 2]. I will continue to follow the latest studies in CSEd,[2] and update teaching strategies regularly based on my experiences and feedback from students.

Mentoring & Advising

During my graduate career at UW, I made mentoring and working with junior students a priority. In total, **I mentored 12 undergraduate and masters students and 5 junior PhD students, from diverse backgrounds, origins, and identities**, many of which I submitted or published papers with [3, 4, 5, 6, 7, 8, 9, 10]. I will briefly describe three of those 17 mentoring experiences.

- **Xinyao (Michelle) Ma** (BS student) — I co-advised Michelle on a project I proposed to her, to revise and debias portrayals of characters in text. I met with Michelle weekly, and suggested modelling and evaluation directions based on Michelle's results and ideas. I also gave her technical writing advice during paper writing, and worked with her to create a conference presentation for EMNLP 2020 [8]. Through this experience, I learned how to advise a student from the start of a project all the way to its publication.

[1] https://courses.cs.washington.edu/courses/cse490u/16sp/

[2] E.g., through the Computing education research blog: http://computinged.wordpress.com/.

- **Xuhui Zhou** (MS student) — I have been advising Xuhui on a project to automatically mitigate racial bias in hate speech detection. Xuhui has a specific research interest, which I translated into a concrete goal. Similar to with Michelle, I met with Xuhui weekly, and provided research guidance and career advice. I also provided him with feedback to improve the clarity and structure of his technical writing, during our EACL 2021 submission [10].
- **Emily Allaway** (BS student, now a PhD Student at Columbia University) – I co-advised Emily on a social commonsense knowledge collection project. During our weekly meetings, I iterated with Emily to develop our crowdsourcing framework, with which she collected over 100k annotations. I also provided guidance on modelling experiments and evaluation setups. In the end, my work with Emily yielded two top-tier conference papers [4, 5].

Mentoring & advising plans Having already mentored several junior students, I learned to be adaptive in my advising style and to meet the student where they are. As a professor, I look forward to building a longer-term mentoring relationship with my PhD students, which will evolve as they become more seasoned researchers. Additionally, I plan to continue mentoring students from historically underrepresented backgrounds, as I did during my PhD.

Outreach & Broadening Participation

Computer science researchers also act as role models and representatives of the field. With that responsibility in mind, I **participated in outreach efforts and created structural change** through leadership positions during my PhD career, which I plan on continuing as a professor.

Outreach events — I participated in several outreach efforts to encourage young students from all backgrounds to pursue computer science, including helping my department recruit students at the Tapia diversity in Computing conference. Additionally, in 2017 and 2018, I co-organized events to **teach K-12 and high school students about artificial intelligence** and to showcase my team's competition-winning chatbot.[3]

Public-facing presentations — I have been fortunate to have my work covered by various news publications, including Forbes, GeekWire, Vox, and Fortune. Through conversations with journalists, I learned to **explain my research to a broad non-technical audience**, which requires conveying the most societally relevant aspects of my work with relatable examples.

Leadership & community organizing — During my PhD, I spearheaded several structural efforts to improve diversity and inclusion, and broaden participation in CS. As a founding **member of the Allen School's diversity and graduate advisory committees**, I worked to make the graduate admissions process more fair, and the PhD course requirements more accessible for students with non-traditional backgrounds, for example. Recently, I also participated in diversity efforts within my academic community as **co-chair of the socio-cultural diversity and inclusion committee** at the ACL 2020 conference.

Plans for outreach Looking ahead, I will continue my efforts to broaden participation in computer science through public outreach and community involvement. Additionally, I am committed to fostering an inclusive and diverse environment where students from all backgrounds can thrive.

[3] https://www.cs.washington.edu/research/nlp/soundingboardevent

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