

# Service Statement

Wei Li, CMU ECE

My journey to Carnegie Mellon University began on a bus rattling through the mountains for two hours—the only route connecting my rural birthplace to the high school in the county seat. This county was one of the most impoverished in the nation. As a first-generation college student, I learned early on that these two hours of physical travel were far shorter than the invisible chasm separating students in resource-strapped regions from the frontiers of academia.

This chasm is not merely financial; it is a pervasive lack of access to information, mentorship, and the “psychological safety” to fail. In underserved communities, students often operate with extreme caution because they lack the social safety net to withstand even a single setback. This realization has driven my commitment to bridging this gap. To that end, I established a scholarship at my home high school to cover a full year of living expenses for students who, like me, come from the mountains.

However, I believe that financial aid alone is far from sufficient. My philosophy has been deeply shaped by my advisor, Professor Shawn Blanton. His tireless work inspiring underrepresented minority students through organizations like NSBE showed me that a mentor is not merely a transmitter of technical skills, but a “bridge over the chasm.”

In my own experience mentoring, I have noticed that students from humble backgrounds often get stuck on the “hidden curriculum”—those unwritten rules of academia that everyone assumes are common knowledge. To demystify this, I use my blog to share these ‘common knowledge’ nuggets, providing practical tutorials on tools like KLayout. I also built a detailed “Research Wiki” for my mentees, covering everything from paper retrieval and environment configuration to sample tool scripts. My goal is to ensure that a student with zero prior research experience can have a smooth, frictionless start. I am particularly committed to supporting groups that are underrepresented in engineering; half of my mentees have been women, and seeing them move on to NVIDIA, HKUST, or competitive PhD programs is the proudest part of my work.

As a future professor, I plan to put these lessons into practice:

- **Holistic Talent Selection:** In recruiting PhD students, I will look beyond standard metrics to value the “distance traveled” by an applicant. I will actively seek to recruit first-generation college students, those from low-income backgrounds, and others who are underrepresented in the ECE field.
- **A Clear Starting Point:** I will implement structured onboarding systems, including lab manuals and “how-to-ask-for-help” guides, to remove the guesswork from research for first-generation students.
- **Equitable Opportunities:** I will use rotating roles for presentations and project leadership to ensure that resources and visibility are not reserved solely for the most extroverted students.
- **Inclusive Teaching:** I will use clear, transparent rubrics for grading to ensure fairness and implement anonymous feedback systems. I will also host “Office Hours 2.0” to explicitly teach academic literacy—such as how to communicate with faculty or navigate research opportunities.
- **“From Mountains to the World”:** Following Professor Blanton’s example, I will leverage conference travel to visit schools in rural or underdeveloped areas to provide career planning workshops.

My goal is not just to be a top scholar. I strive to be the mentor who recognizes the “hidden talent” that others might overlook, serving as a bridge over the chasm for the next generation of students. I am committed to building an academic community where every student—no matter where they come from—feels they belong and has the psychological safety to give their very best.