

Part of my goal in pursuing a graduate degree is **my genuine enjoyment of teaching** and belief in the power of personalized education.

From my undergraduate days at USC to my current MS at Duke, I have been fascinated by the art of teaching and the importance of understanding a student's unique learning style. **I aim to contribute to Duke's academic community via two distinct approaches: creating resources and direct mentorship.**

"Creating resources" is a formal extension of keeping my own lecture notes, a habit I have maintained since my sophomore year. The motivation was simple: many courses I wanted to take lacked publicly available scribed notes, so I decided to fill the gap for future students. I am equipped with a niche skill: **real-time \LaTeX typesetting** using a heavily snippet-augmented Vim and Inkscape workflow. This allows me to turn live lectures into detailed, self-contained write-ups. I have done this for nearly every advanced Math/CS class I took, making them publicly available. I pay particular attention to "sticking points" where first-time learners often stumble. For example, I went in-depth explaining the intuition of the $\epsilon - \delta$ language for analysis and wrote supplemental sections on residual graphs for the Ford-Fulkerson algorithm. These documents, often exceeding 100 pages, serve as hands-on course materials among my peers and even a few instructors. It has been fulfilling to see my notes circulating among the STEM communities at USC. (I have not distributed notes at Duke, but I have maintained ones for CS 630/632/634.)

Regarding direct mentorship, I have thoroughly enjoyed **servicing as a TA**, particularly for theory-heavy classes where the challenge lies in explaining abstract objects rather than debugging code. In my first two semesters at Duke, I have TA'd three undergraduate algorithms classes. In my office hours, I remind myself that everyone comes from a diverse background with a unique way of learning. **I tailor my pedagogical approach to the individual**; some prefer a rigorous theoretical derivation, while others are visual learners who thrive on geometry. Adapting to these different learning styles is an engaging challenge. Over time, I have honed the ability to make abstract proofs accessible to everyone. **I look forward to continue practicing these two habits and contribute to Duke University's scholarly community.**