

Teaching Statement - Thaleia Dimitra Doudali - thdoudali [at] gatech.edu

In this statement, I describe the inspirational figures and experiences that shaped my teaching vision, as well as the ways I have already put it in practice.

The Inspiration.

My first academic role model is my mother, a middle school teacher of French in my small hometown in Greece. While other teachers are failing students who do not keep up with their grades, my mother cares to understand why a student is struggling. She volunteers to help them out after school for free, so as to improve their grades and have a safe space to express themselves during their sensitive teenage years. The caring love of my mother for her students inspires me immensely and continues to grow with every story she shares with me.

During my undergraduate studies, this care for mentoring was showcased by the students themselves. I always looked up to the many senior students who would help out junior students with their coding assignments of the introductory programming class without being the primary teaching assistants nor being paid for it. Moreover, the Computing Systems lab (CSLab) at NTUA, where I completed my undergraduate research thesis, was a space where I developed my passion for research and collaboration. Every day I would look forward to lunch time, where I would eat together with graduate students, who I looked up to, and cherish their funny stories and advice. My advisor introduced me to the importance of patience and persistence, by motivating me to write my first research paper and keep improving it until it got published two years after I had graduated.

As a graduate student, I am part of a big research lab with students from all over the world and a female advisor who strives to create an inclusive and warm culture in the lab, with effective collaborations among the labmates. I feel extremely lucky to have a patient, caring and understanding advisor who continuously inspires me to work harder given her dedication to her work and family. In addition, I interned in three big tech companies and had exceptional mentors and colleagues. The first internship mentor taught me how industrial product development works, the second one motivated me to patent the results of my work, and the third one challenged me to introduce machine learning to my research, resulting in a research artifact that was an HPDC'19 best paper award finalist. All these mentors have helped me better understand my strengths and pushed me to develop them and excel.

Apart from great mentors, I have come across great instructors throughout my studies, who put effort into understanding the students' psychology of a given academic level, to adjust and adapt to the students' needs, and to strive to create a fair and rewarding learning and evaluation experience. As a high school student that took an intense university entrance examination and later as an undergraduate college student that went through a demanding five-year degree consisting of sixty classes, I reached a point where taking exams was very emotionally and physically tiresome. As a graduate student, I found project-oriented classes a refreshing change in the way I was getting evaluated. Even during unforeseeable circumstances, such as the Covid-19 pandemic, which led to the sudden transition to online learning, my instructors were able to quickly adjust and offer support to students.

The Experience.

I first expressed my aptitude to mentor and pass on knowledge during my undergraduate studies. I was actively participating in online discussions and moderating the school's forum, where I would share my class notes to help out other students. I would always try to be highly available to the students that needed my help, either in person or online, since this was something I appreciated a lot from other students and professors. During my graduate studies, I have continued to apply this principle of high availability, patient and focused guidance, in my role of a teaching assistant for the advanced operating system graduate-level class and as a mentor to junior Ph.D. students or undergraduate researchers, since I have experienced how hard and time consuming it is to find the right approach to research. Additionally, while serving as a teaching assistant, I took the initiative to restructure the course projects to clarify instructions, enable faster evaluation, and facilitate plagiarism detection. I redesigned projects such that their context was relevant to modern technologies and use cases while evaluating the same underlying principles and methodologies.

In terms of instruction, I have delivered a couple of lectures during my teaching assistantship. At the end of the semester, I was humbled to receive evaluation comments such as *"the teaching assistant could easily understand our questions and always gave crisp and relevant answers"*. Based on my outstanding record as a teaching assistant, for the Summer of 2020, I was approved by the School to be the primary instructor across all sections of the undergraduate Computer Systems and Networks course, CS2200. Unfortunately, the Covid-19 pandemic and subsequent shift to online instruction, made me decide to not pursue this as my first full teaching experience.

My will to mentor and help out goes beyond the classroom and research lab and reaches the whole university community. In April of 2020, I was selected to be the graduate student speaker for "Illuminate Tech", a university-wide inspirational talk series at Georgia Tech. I decided to talk about the four life quotes that shaped my Ph.D. journey, share my struggles and motivate the students on how to overcome their imposter syndrome, balance their academic and personal life and navigate through the ups and downs of the learning journey. The positive feedback and messages of gratitude I received, reassured me that teaching, advising, and caring for the students is what I aspire to do after I graduate.

The Vision.

In summary, the learning experiences I have across all levels of education and the inspiring role models I am lucky to have interacted with, have shaped the way I aspire to mentor and teach students. My exposure to teaching as an assistant and mentoring as a senior Ph.D. student made me realize that I can transform my inherent talent of methodical learning and organized thinking into clear and to-the-point instruction. My technical experience across several domains -- operating and distributed systems, high performance computing and big data, memory systems and interconnects -- make me well prepared to teach a range of topics, and to relate technologies across domains.

I want to use my talents to the best of my abilities and teach students, the way I would want someone to instruct and care for me. If I can help someone reach their goal faster than I did, then I feel that I have helped make someone's life better.