In my journey as an educator, I have had the privilege of guiding and inspiring students across diverse domains. Whether as a Teaching Assistant (TA), guest lecturer in Computer Science (CS), or mentor, my unwavering dedication to empowering learners has been a driving force. This journey has deepened my passion for fostering a dynamic and inclusive learning environment, where **student engagement**, **knowledge exchange**, and **diversity** are at the forefront of my teaching philosophy. I aspire to bring this philosophy to the classroom and advising, equipping students to succeed academically and professionally while instilling the values of adaptability and lifelong learning.

Teaching Experience Over the past nine years, I have been fortunate to serve as a TA for CS courses at two distinguished universities in the USA, a journey that spans from 2015 to present.

During my Ph.D. at Purdue University, I dedicated my expertise as a **TA for 12 times,** spanning a diverse range of **6 distinct CS courses** at both the graduate and undergraduate levels. I have served as a TA **thrice** for '**Natural Language Processing**' **graduate** level course, which had a substantial enrollment of 80 students. Besides grading and taking regular office hours, I was actively involved in designing assignments (conceptual and coding homework), selecting papers for paper review, helping students with their project ideas, and developing grading guidelines. As this course welcomed both graduate and undergraduate students from various departments, I placed particular emphasis on considering students' diverse thought processes and backgrounds when formulating grading criteria. For my contributions to this course, I received the **Graduate Teaching Award** from Purdue CS department. I have delivered a **guest lecture** on "Microtargeting on Social Media" in the Graduate level 'Natural Language Processing' course at Purdue University. I was TA for the graduate-level 'Statistical Machine Learning' course on two occasions, where I engaged with a diverse student cohort of approximately 90 individuals. This course welcomed both graduate and undergraduate students from a wide range of departments, fostering a rich learning environment. In this role, I was responsible for designing homework assignments, grading assignments and exams, and offering regular office hours.
I have had the privilege of serving as a TA for a range of undergraduate CS courses, including 'Data Mining and Machine Learning' (200 students), 'Introduction to the Analysis of Algorithms' (300 students), 'Data Structures and Algorithms' (three times, 400 students each), and 'Foundations of Computer Science' (two times, 600 students each). Teaching in such **diverse and large classes** posed a unique challenge, given the varying backgrounds of the students, from beginners to those with prior programming experience. To tackle this challenge, we employed a multifaceted approach, blending lectures, lab sessions, one-on-one office hours, individual & group assignments, and group discussions, ensuring students had ample resources for active engagement with the course materials, instructors, and peers.
In addition, I gained significant **TA experiences during the COVID-19 pandemic**, when all classes transitioned to online formats. This shift required me to adapt to virtual office hours, Problem-Solving Sessions (PSOs) via Zoom, grading exams using Gradescope, and actively engaging with collaborative discussion platforms like Piazza, Ed, and Brightspace. I was particularly attentive to supporting students facing pandemic-related challenges. For instance, when I was a TA for NLP course in Spring 2022, a student missed a deadline due to COVID and reached out to me. I worked in collaboration with the course instructor to extend the deadline, considered individual circumstances during grading, and conducted one-on-one online meetings to address concerns. This experience underscored the significance of online education and reinforced my commitment to prioritizing students' physical and mental well-being, preparing me for future teaching endeavors.

Previously, while completing my M.Sc. at Old Dominion University, I served as the **sole TA**

for 5 times, covering a spectrum of **3 distinct CS courses**. These courses encompassed both graduate ('High-Performance Computing and Big Data') and undergraduate ('Introduction to Discrete Structures', 'Introduction to Computer Architecture') levels. In this role, I actively engaged in grading assignments & exams, proctoring exams, and conducting one-on-one discussions. This invaluable experience allowed me to work closely with students, providing firsthand support.

Mentoring Experience During my graduate studies, I had the privilege of mentoring a diverse group of students, each with their unique educational journeys and aspirations. I would like to highlight a few of these mentoring experiences:

- I served as a research mentor at Lumiere Education, guiding a high school student, Aayush Motiani from India. Aayush, now pursuing Bachelor's degree at UC San Diego, embarked on a three-month project focused on creating Machine Learning (ML) models to predict future crime locations, despite having no prior programming or ML background. Throughout this mentorship, I guided Aayush in starting his journey by teaching Python programming, helping with data collection, explaining fundamental ML algorithms, assisting with data pre-processing, and facilitating ML model development. Additionally, I offered guidance on technical paper writing as part of the mentorship program's final report requirement.
- I collaborated with Eleni Adam (ODU CS Ph.D. student) on developing a nanopore-guided regional assembly tool [1]. This project was built upon the computational approach that I introduced, known as Regional Extension of Assemblies using Linked-Reads (REXTAL) [4, 5]. As the team lead, my responsibility included transitioning the project to Eleni as I approached the completion of my M.Sc. degree. We held regular one-on-one meetings to discuss project progress, and I provided Eleni with the necessary data and code for REXTAL.
- I worked with Alice T'Poteat (M.Sc. in MSVE at ODU) on a research project focused on quantifying the twist of β-strands in the secondary structure of proteins [3, 2]. I was responsible for implementing the methodology and conducting tests, while assisting Alice in organizing data and summarizing results.
- **Non-CS Experience** I served as a volunteer mentor for refugee resettlement through Commonwealth Catholic Charities (CCC). I had the opportunity to provide guidance and support to five children from Afghanistan who were facing educational challenges. My multilingual background helped bridge the language barrier and aided them with schoolwork.

These mentorship experiences have enriched my perspective and strengthened my commitment to student success and excellence in education. I am eager to continue this commitment in my future roles as an educator, bringing my passion for mentorship to the classroom and contributing to the growth and development of students from diverse backgrounds.

Teaching Interests At the undergraduate level, I aim to teach general courses on machine learning, data mining, and natural language processing. Additionally, I can teach fundamental CS courses on foundations of computer science, algorithms and data structures, discrete mathematics. At the graduate level, I am willing to offer courses in established areas such as natural language processing, machine learning, data mining, and deep learning. Furthermore, I am particularly enthusiastic about developing and teaching new courses and research seminars based on my research expertise and emerging trends in AI, ML, and NLP. These may encompass innovative topics like **social media mining with NLP**, **NLP for computational social science**, **reasoning with LLM**, and **human-centered interactive NLP**.

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