

My motivation for applying an academic position is that I love enriching the hearts and the minds of college students. In computer science, I understand that it is critical to lead students to discover what they are curious about and capable of doing. I can convey that learning computer science is both exciting and useful by guiding students to work on projects that interest them and have real-world applications. By sharing my passion for learning and using a variety of teaching approaches, I believe I can make the classroom an engaging and inspiring experience for students.

Engaging I believe students achieve best when they are actively engaged in their learning. I fully embrace a student-centric curriculum. With this mindset, I usually act as a facilitator in the learning process rather than the deliverer of information. Through formal and informal discussions, I encourage students to be aware of the latest technologies and events that shape our society. Specifically, I guide students to work on a "Team Tech Talk" project where their team can look deeper into a recent trend in Computer Science and create a video to share what they learn to the community. Since Fall 2014, the students in my courses have produced over 200 tech videos and enjoyed working together to create them. Additionally, I believe how the students are treated has a profound influence on their performance. I encourage students to discuss with me any learning difficulty such as study skills or test anxiety that could potentially impact their success in the class.

Discovery I commit to guiding students to discover their knowledge and what they are capable of doing on the subject of the course. I organize and structure the course into a weekly outline which is easy for students to follow. Beyond the lectures, I have designed other learning resources such as demonstrations, articles, and videos for students to learn on their own time. Most importantly, I provide an extra credit opportunity for students to discover some events outside of the classroom, particularly at hackathons. The hackathon experience of discovering what they might be interested in and sharing their creation with peers is invaluable for learning. I find that exposing students to real-world problems at hackathons will also provide them a sense of accomplishment.

Lifelong I endeavor to provide students the love for lifelong learning by developing within them the habit of writing, reading, assessing, and analyzing on a weekly basis. I believe that teaching is to help students learn how to think critically, solve problems effectively, and apply solutions practically. The students often learned a lot from investigating their core values, personalities, and strengths to align them with a career path. I have designed weekly assignments throughout the semester in such a way that they can be integrated into a web-based portfolio that students can carry with them after finishing the course. It is my greatest joy to hear students share how they landed an internship, completed a software project, or simply overcome one of their obstacles.

My enthusiasm for introducing computer science problems and techniques to beginners, particularly those who may not be attracted to the field traditionally, means that I would enjoy teaching introductory courses or intermediate classes in data structures and algorithms. Of course, I am willing and able to teach any core computer science courses. My research background strongly equips me for teaching upper-level courses in artificial intelligence, particularly in digital image processing, computer vision, and machine learning. If given an opportunity, I am particularly interested in developing a series of computing professional development courses emphasizing the partnership and engagement with industry companies. My goal in any courses I design would be to put into practice the principles described above while ensuring a high integration with the departments computer science curriculum as a whole.