Teaching is an important activity in academia. Although the major component involves transferring knowledge, I see teaching as an opportunity for both the teacher and the students to collectively learn and improve each others' understanding of a subject. My strongest motivation for teaching is this opportunity to interact and engage in this collective learning experience with young and bright students who are on the stepping stone of their careers.

Teaching and Mentoring Experience

Teaching. During my graduate studies at NCSU, I worked as a project coordinator for two courses — *service oriented computing* and *social computing*, three times each. As the project coordinator for these courses, my key responsibilities included (1) preparing problem statements for the course projects, (2) setting up the programming environment for students to debug their projects, and (3) assisting students in understanding the project definitions and heling them debug their code base. As the project coordinator, I also assisted teaching assistants of these courses in developing course assignments which were precursor to the larger course projects. I prepared problem statements for the course projects such that they (1) reinforce concepts taught in the course lectures, and (2) train students on state-of-the-art technologies. Although this was time consuming, it was heartening for me to learn from several students that their course projects played an important role in fetching them industry positions after graduation.

Mentoring. I also enjoy helping and mentoring students. At NCSU, I helped advise two master thesis. I formally and informally mentored one high school student, two undergraduate students, and six junior graduate students.

Teaching Interests

I would like to align my teaching and research interests, where possible. In this way, I can both teach state-of-the-art techniques and actively engage interested students in research.

At a foundational level, I am interested in teaching units on software tools, data-driven software systems, artificial intelligence, and machine learning to the students enrolled in the Computer Science BSc course. At an advanced level, I am interested in teaching the units on responsible AI and human-computer interaction to the students enrolled in the MSc and PhD courses. Apart from these units, I am both interested in and qualified in teaching several other units including algorithms, databases, and software security. I can teach these foundational and advanced level units in their current form or adapt them according to the objectives of the Department of Computer Science at Bristol.

I am also willing to mentor students in their individual and group projects at BSc and MSc level. I am confident my experience of working in industry research and as course project coordinator will be of great help to students.

Teaching Methods

Cognitive Approach. First, I will incorporate a cognitive approach in my teaching. Realizing the importance of the "why" question before one can answer "what" and "how", I will focus first on making the students understand the problem and then work toward a solution.

Balancing Theory and Practice. Second, balancing theory and practice is an important aspect of teaching computer science. I will design my lecturers to educate students on the concepts as well as to train them on using those concepts. This will both develop students' intellect and equip them with the skills their careers demand. Learning from my project coordinator experience, I will make sure that the assignments reinforce the material I teach in my lectures.

Diversity. Third, higher-education institutes are culturally diverse. Diversity enhances students' experience, but could make teaching a challenging task. I have been fortunate to have collaborated with people from diverse groups including from different gender, and cultural and educational backgrounds. I respect differences and appreciate diversity. I will do my best to accommodate for them in my teaching.

Motivation. Fourth, I imagine that a student does well in a course not just because of dedication, but also because of being passionate. In foundational units, for students seeking industry jobs, I will demonstrate how concepts they learn can lead to applications which benefit society. In advanced units, I will invite researchers to present state-of-the-art research relevant to the course units to motivate students in a research career.