Teaching Statement

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Teaching Philosophy. Learning is a skill that needs to be taught and a habit that needs to be cultivated. It is imperative to not only impact knowledge or relay facts, but to instill a love of learning and to create lifetime learners capable of critical and analytically thinking. Teaching is a profession that is beneficial both to the instructor and student when passion and a willingness to learn is involved. I am fulfilled when I impact knowledge to students and I have taken advantage of every opportunity I have had to teach.

Teaching Experience. I initiated tutorial classes during my undergraduate program at Covenant University in Nigeria. This tutorial came about because I was having to peer teach my classmates and, my lecturers felt it would be good if I instead have weekend classes for any of my peers interested so I can give a summary of what was taught during the week. These tutorial got me really interested in teaching and I taught tutorials from my sophomore year to my senior year. I returned to Covenant University for my masters program, and I willingly chose to be a teaching tutor for lower level classes. I assisted in two courses (Introduction to Computer Science and Computer graphics) and a teaching instructor for the senior level Bioinformatics class which recorded an improvement in performance in the year that I taught. This was because I decided to use a different approach from the traditional teaching method. I simplified the material by applying more real life applications of Bioinformatics and paired up the students to do projects and assignments together.

In the Fall of 2015 at Texas A & M University, I became a part of the Teaching Fellows Program and I was a co-instructor with my advisor in the Engineering Honors Seminar Class ENGR 181 with a student size of 108. I helped revise the curriculum and took up responsibilities to include preparing teaching materials, teaching, grading and frequent out of class interaction with the students. This experience has helped me identify an effective teaching method that I plan to employ in my teaching program. I will continue to teach this class in the Spring of 2016 and the anticipated class size is 200. I am excited about this class because it has given me an opportunity to interact with intelligent students with a drive for learning and also students who need some more motivation to improve performance and I handled them all to the best of my ability.

Student Research Mentoring. I have applied my teaching philosophy when working with undergraduates who have done research in our lab. An undergraduate research project is a self contained piece that gives the student freedom to explore and develop. All of the students I have research mentored have worked on robotic motion planning or protein folding projects that explored small pieces of a large project. In particular, I worked with an undergraduate student Diane Uwacu and she co-authored a paper published in one of the premier international conferences in robotics IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2015). This fall she started in our PhD program and I am mentoring her as she begins her graduate studies. I also mentored two female high school studentsteaching them about how to do research and various research to participate in. They were able to successfully work on updating our public research webpages.

Teaching Training and Interests. The College of Engineering at Texas A&M has a Teaching Fellows Program which is awarded to students who have a strong interest in teaching. I was awarded this fellowship and apart from being co-instructors in a taught class, we had weekly meetings with Professors who gave us life experiences about teaching and research programs as a whole. I also took part in a Professional graduate course about future faculty expectations and this gave me a good foundation about starting a teaching program. I can teach any course that is a part of the core undergraduate or masters Computer Science curriculum and specialty courses in my areas of expertise. I am most excited by teaching subjects in my primary research areas including: artificial intelligence, algorithms, computational biology, and robotics.
Summary. I believe in interacting with students, give students a little bit of freedom to explore the course content outside of class and award points for doing this so it serves as a motivation. Students have a lot of information themselves that they can share with each other if given the right avenue. I believe in peer teaching as this removes the tension of having to speak to professors which can be intimidating to students. Grading would also be flexible to take into cognizance both weak and strong students. I recently learnt about a method where you employ bonus questions during exams to keeps top students fully engaged and I have been looking at the effectiveness of this approach. Teaching should go beyond knowledge about facts and theory. It should teach students a way of thinking about problems that will help them become valuable citizens to both their country and organizations where they plan to build a career.