

Personal Statement

My enthusiasm for computer science comes from two factors: my natural curiosity towards things I don't understand and my passion for problem solving using smart programming. Computers are complex machines and I am continually fascinated by new ways in which they can be applied to solving problems in an intelligent way. For me the most exciting part of my subject is learning a new technique and applying it to solve problems. I want to use my degree to solve the hard problems, not the easy ones.

I'm drawn to apply to postgraduate positions in the medical domain for a number of factors. Firstly, the area has a clear and meaningful application towards helping people which makes it personally satisfying and a worthwhile endeavour. Secondly, I enjoy the idea of working in areas on the borders of disciplines. During my undergraduate I took an industrial year out at ISIS Neutron Source where I worked in close collaboration with computer scientists and physicists on neutron scattering analysis software. I found that one of the most rewarding parts of the job was working alongside people from a completely different scientific discipline. Thirdly, I believe that the problems posed in medical analysis offer some of the most challenging problems and is an exciting and active research area in which my academic ambitions can be realised.

Currently, I am working through the fourth year of my degree and undertaking a dissertation project looking into the application of dimensionality reduction techniques to the feature space of both real and synthetically generated mammograms. The end goals of the project are to try and understand the similarity of the two datasets under projection, particularly in regards to risk classification.

My undergraduate and placement year has given me excellent programming abilities and problem solving skills suitable to a role