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November-2013

Personal Statement

Computer Science has been the course that I wish to study since my interest in computing was captured while I was working with the Java programming language, modifying an indie sandbox game in 2010.I feel that this demonstrates that I have the drive to learn and further my knowledge in the computing field and hence my desire to study Computer Science at University.

Involvement in modifying and running these game servers online has given me experience in basic IP configuration tasks such as port forwarding. A section of an online MIT course that I took over the summer, Mathematics for Computer Science, taught me more about communication networks and provided me with a more detailed knowledge of how Network Latency can be optimized by selecting different routings. Most enjoyably the course provides theoretical problems such as a binary tree that is easily congested with 4 inputs, 4 outputs and 6 switches. By thinking logically I found the optimum routing and thus I was able to solve this problem.

I am very interested in improving the performance of my PCs and am constantly looking for ways to do this, for example by upgrading hardware in my PCs or adjusting how my computer allocates its memory between the GPU and the CPU depending on the tasks I'm carrying out. Using a Raspberry Pi has given me basic skills through using the python programming language and HTML. My knowledge of Python has also allowed me to create small games such as a basic hangman game and a game which is similar to Snake. The device has provided me with a platform to build my own website. This has allowed me to build skills with HTML which has the external benefit of giving me an increased ability to structure information whilst using a computational language.

My python programming skills were further increased when I completed another MIT online course entitled an introduction to computer science. Using the skills that I had learnt on the course I found that I was able to solve increasingly more complex problems, for example calculating how much interest one had to pay on their credit card debt.

My choice of A level subjects has been useful as they have helped me to develop skills that I will use in my futures studies. I have enjoyed the logical and methodical approach that I have adopted to provide mathematical solutions as part of my A level course. I have found this approach particularly satisfying, especially as it is similar to writing lines of code and ensuring your work is in produced in the most clear and structured manner. In addition, some of the skills that I have acquired in my other A-level subjects I have found useful when using computational programming languages. For example, the logical thought processes required in order to move through a mechanism that we have studied as part of Organic Chemistry or when applying chain analysis whilst writing an Economics essay have been helpful when applying computational methods to solve a particular problem.

Aside from my computing interests I have worked voluntarily, on a weekly basis, in a local primary school. Working either alongside the teacher or on a one-to-one basis with the pupils, I helped the students to develop their skills in English and Mathematics. This has improved my communication with staff and pupils alike and increased my confidence in my own

ability to work with other people. I am also one of 6 upper sixth students who have been selected to represent the student body on the sixth form council which makes decisions on every issue involving 6th form life such as improvement of catering facilities to refitting the sixth form common room. This has enhanced my ability to put forward an idea, debate its merits and see it through to becoming school policy. Playing 1st XI school cricket and 2nd XI Premier League cricket since Year 10 has developed my abilities as a team member. Captaining my Club junior side to a league title has developed my abilities as a leader of a team.