Why computer science is the path i want to follow

Science, Computer Science

To be fair, at first when I was struck by the question if computer science interested me I wasn't quite sure. This was a long process but one that made myself sure and confident that Computer Science was the path I wanted to follow. Initially, it was just me playing computer games but as soon as I got older and had more experience operating with computers it intrigued me to know how the GUI works and the methodology of how it functions. I can still remember the elation I felt when I first wrote my own program in class, and to this day, I still love the way it allows me to express ideas and do experiments and visualize things. I felt like a magician unveiling inside me and this was a feeling I had not experienced with any other subject. Furthermore, another event which really drew me into Computer Science was when I read " Introduction to Algorithms" by Thomas H. Cormen. This book presented me with a completely new world, the world of algorithms. In addition to this, I learned a lot of new aspects about this field. The world we live in is the Digital Age and computers nowadays have infiltrated every aspect of our lives. I believe Computer Science is an extremely important field. Hence why computer scientists theorise, design, develop, and apply the software and hardware for the programmes we use day in day out and the possibilities they could offer us in the future are endless. This is the reason I want to study computer science.

Currently, I'm still particularly fascinated with how computers work, their software architecture, how they can store such immense amount of data and recall it at an instance, how an object of miniscule size such as a processor can perform such complex algorithms.

In my opinion to be a successful student you need to expand your horizons, be able to communicate and capable of independent research as an individual to expand your knowledge.

The A-Levels I chose to study (Maths, Further Maths, Computer Science & Economics) and my teachers have all helped me develop these basic fundamentals and most importantly my understanding of each subject. A-level Maths and Further Maths have taught me how to apply formulas and equations into computing, such as utilising my understanding of algebra and series to solve problems by thinking algorithmically. Computer Science has helped develop my Python programming skills as well as teaching me aspects of computing such as networking and computer architecture. Studying Economics has helped me comprehend the business world which is a skill that is transferable to computing because computer scientists also need the business acumen to negotiate the right price for their services. It also helped me to improve my analytical, judgemental and evaluative skills.

My interest in computing has not been restricted to the classroom. When I first started programming at the age of 12, I created a table tennis game for android using Google App inventor. Since then, I’ve been taking part in online programming courses on Codecademy. com and edx. org.

I’m fluent in three languages (English, Spanish & Portuguese) which I make the most out of in my spare time by reading spanish and portuguese news articles because I believe that languages are key, especially in this world so diverse and global communication has never before been more important. In my spare time, I also occupy myself playing problem solving games such as chess and sudoku. At 17, I also have a full driving license already. This experience was a long one but very rewarding. My driving instructor taught me how to deal with my nerves and how to be a perfectionist on the road which also translated to my study ethic.

I have done work experience in the Francis Crick Institute, where I created a website using Drupal 8. During the project, I learnt a broad variety of skills such as provisioning servers for the website, setting up the required network connections, learning the basics of HTML and CSS, and delivering a presentation about the work. This experience helped me understand how a project must be managed, how to respect deadlines and have a taste of the day to day problems that a programmer faces. I also learnt to listen to other people’s opinions and improve my performance based on constructive feedback. Furthermore, I attended a UCL Year 12 Curve Sketching Summer School where I was introduced to new things, such as the Fibonacci sequence and the golden ratio. Not to mention, I also enhanced my ability to work in a more team orientated environment and to analyse situations and apply creative thinking to develop appropriate solutions. I also had a 1 month work experience at a clothing alterations company, where I was mostly helping with data entry however I was also involved in the early development of a bespoke mobile application to control their business activities. I gave suggestions on how the GUI should be designed so it can be easily usable and navigable.

Upon finishing my degree, my goal is to have a career as a software engineer and creating applications that improves people’s lifestyle and that meets their needs. Completing my studies at your university should provide the perfect platform for me to achieve my ambitious goals, and I eagerly look forward to the opportunity.