

Whether it's disassembling alarm clocks with no hope of reassembly or replacing motors in RC cars, even as a child I've been known to be inquisitive and to want to understand the world. As I've grown older I've found interest in penetration testing, Linux distributions and creating live USBs: broadening my perspective on how important security is and how the dangers its absence can pose are so unaccustomed. My end goal has always been definite, to work for the government at GCHQ as a software engineer, taking a specific pathway to ensure I get there. This had stemmed from being taught encryption algorithms in school and was reinforced by our trip to Bletchley. At 10, I remember being given additional tutoring where, as a small group, we would learn critical thinking, problem solving and memory techniques. This has stuck with me and is a common theme in my thought process and approach to problems, breaking them down into almost mental pseudocode. Throughout school I would always take up any offers involving a challenge, this led to the EBP presentation, where we gave a speech to over 200 people wholly in Spanish about a fictitious business and came runners-up, taking maths GCSEs early, the higher and lower school maths challenges every year and now the physics Olympiad. I enjoy these as they offer an unconventional set of questions that pose an unusual challenge. Also, I received the Scott Donnelly award during school, this is given to one person in the entire school and aims to recognize 'exceptional talent' regarding ICT & CS. I have completed my Bronze and most of my Gold Duke of Edinburgh award too. In year 13 I participated in the HE+, experiencing university style maths lectures that explored applied maths and some of the more complex ideas that were used in computing. For my EPQ in college, I used the GPIO repository and created a home automation system with it, my web server and an 8-channel relay which can control things like lights and motors, incorporating vb to create a voice-controlled system. After my GCSEs, I applied for a job in a computer repair shop and was given the role of 'weekend manager'. I would open and run the shop alone: talking to customers, consulting them on problems, taking payment and fixing any issues they had. These issues were usually related to virus removal although often the repair would require OS reinstallation, hardware troubleshooting, and replacement, primarily repairing laptops but iPhones and desktops are also common. In the past I've written programs in various languages and will often go back to tinker. Some examples include Python Encryption programs, several websites written using MySQL, PHP etc, a P2P TCP remote access aid, repair menus for use at work and other utilities. I've also begun hosting websites for small businesses on my WAMP server under my desk, earning a few pounds each month. Since turning 13 I have been in work, starting as a paper boy, then a waiter. The income from this part time work contributing to my first PC build. My school work experience resulted in full time summer employment for the next 3 years. Here I soldered components, diagnosed and swapped hardware components and then tested before shipping. University will give me the key to the door to a career in government, doing my part for the country in the field I feel I will excel most in. The future will almost all be digital and so studying a course in a subject that the whole world will revolve around was an easy decision for me to make.