

QUALIFICATIONS AND AWARDS

First year results: Mean mark of 83%, first achieved in every module. (MSci Physics, University of Birmingham Sept 2015 - July 2019)

A Level results: A*A*A*A* in Biology, Chemistry, Mathematics and Physics. Plus General Studies AS at grade B. (Sept 2013 - July 2015)

GCSE's: Mathematics (A*), Chemistry (A*), Biology (A*), Physics (A), English Language (A), Business Studies (A), Computing (A), Graphic Product (A), English Literature (B), Latin (C) and Religious Education Short Course (A). (Sept 2008 - July 2013)

Siemens Greenpower digital award 2016; Certified LabVIEW associate developer (CLAD); Commendation in the British Physics Olympiad; ICT Function skills level 2; UKMT mathematics challenge- Gold, silver and bronze; Language leaders award for Latin; School award for the wider use of ICT, best A level results and best physicist; Silver STEM award; The University of Birmingham A level results scholarship; Full & clean UK driver's license.

PROFILE

I am currently a second year undergraduate MSci student at the University of Birmingham. I regard myself as one of those people who always questions how and why, and strives to understand how anything and everything works. Building Lego models and model railways without manuals helped my love for understanding the world grow, and by the age of twelve I rebuilt a motocross bike from parts. It is from this that my love for understanding and learning has evolved. I view myself as being particularly good at problem solving due to my resilience and ability to think both logically and outside of the box. My ability to communicate conceptually challenging ideas usually always helps when tackling tough problems.

I consider myself to be technologically minded and I have had experience in many programming languages and believe myself to be competent with most common software packages from Microsoft Office to photo manipulation.

In my spare time I enjoy training at the gym with friends and taking part in Society social events; I am currently a member of the Motor Racing Club, Mountaineering Society, Poynting Physical Society and the Raise and Give Charity for which I am currently the website and app manager.

EXPERIENCE

Over the last three years (Sept 2013 - Current, Renishaw Plc Wotton Under Edge) myself and a team of professionals from Renishaw plc have designed, built and developed three single-seater electric cars which compete in the international Greenpower racing series. During this time we achieved first place in the international corporate challenge event every year and last year we also won the

overall championship beating teams from the likes of Jaguar Land Rover, Lockheed Martin, Cummings and Universities from around the globe. The team and I have also won several additional awards for innovative designs and engineering on the cars; this included the Siemens digital award this year for innovative use of electronics and design, for which my 'Greenpower HUD' live telemetry android app was selected.

Being part of the team meant I was consistently involved in explaining and presenting the engineering and software used within Greenpower to school children, 6th formers and other professionals. Being an ambassador has taught me a great deal of communication skills, as well as improving my own knowledge on the subjects.

During my time volunteering on the team I secured a full time summer placement at Renishaw where I spent 11 weeks working in the CMM research and development department (July 2015 - Sept 2015, Renishaw Plc Wotton Under Edge). During my time I was able to understand the principles and ideas behind some of their new products and the process of improving existing ones; and more importantly gained some vital experience in the world of business whilst improving my knowledge and communication skills from world leaders in their field.

Over the last summer (July 2016 - Sept 2016, Renishaw Plc Wotton Under Edge) I was offered an additional summer placement at Renishaw, this time I was working with the Service Verification and Integration Group where I spent most my time producing software solutions to test, analyse and report the results for new products. The projects I was involved in include graphical rendering solutions, server-client monitoring programs, networking data harvesting programs and 4D plotting tools. I thoroughly enjoyed my time on this placement and having to fully document the software I produced, whilst following coding standards and collaborating with other team members using source control, considerably improved my professional software development skills. Taking over programs written by other team members was particularly useful because it taught me alternate solutions which could be useful in other programs in the future; having to explain and document my solutions helped to consolidate and optimise my logic.

I also run a small software development and website design and management business (December 2010 - Current); I have developed several websites for both local and major businesses from the local riding school to the NHS academy in Bristol. I also write android and windows apps, my current project being an android app for the largest society at the University of Birmingham.

I was selected to represent both my secondary school and sixth form as a prefect, and have on many occasions assisted in running open days and school tours. I was also asked to assist in a GCSE computing class last year to help teach programming to the students. I have also volunteered at an engineering charity, helping at events and running a weekend stall at 'CarFest' in 2015.

REFERENCES

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