Thomas Robson - Curriculum Vitae

E-mail: tomrobson19@gmail.com, Phone: 07521 705080

Address: Woodpeckers, Lower Wokingham Road, RG45 6BX

Profile

I am a fourth year Computer Scientist seeking a graduate role in a prestigious and innovative company where I can put my skills to good use. I believe that I can offer strong technical and organisational skills, along with a professional attitude and good communication skills.

Degree

Currently studying towards MEng in Computer Science at Durham University. Achieved a 1st in the first, second and third years of study.

- Programming Languages: Java, C/C++, Python, HTML, CSS, PHP, JavaScript, NodeJS, SQL
- Notable Topics Studied: Machine Learning, Cyber Security, Computer Vision
- Individual Project: Camera-to-Camera Tracking for Person Re-identification within Thermal Imagery
- Group Projects: Web-Based Volunteer Management System for the Wear Rivers Trust Charity, Administrator and User Dashboard to Support the Citizen Science Approach of the MammalWeb Project.

Qualifications

Educated at Wellington College September 2009 - June 2014, achieved the following results:

International Baccalaureate Diploma - June 2014:

Total of 41 points:

- Higher Level Topics: Maths 6, Physics 6, Economics 7
- Standard Level Topics: English 6, Spanish 7, Politics 7
- Extended Essay on the theoretical grounding of Computer Science, exploring the proofs of Russell's Paradox, Gödel's Incompleteness Theorem and Turing's Halting Problem.

GCSE - June 2012:

 $Maths - A^*$, English - A, $Greek - A^*$, Latin - A

International Baccalaureate Middle Years Program - June 2012:

Full range of subjects studied, achieved six 7s and three 6s.

Work experience

BAE Systems Applied Intelligence July 2017 - September 2017

As an intern software engineer, I worked on a data ingest system using Hortonworks Dataflow (HDF). This made use of Apache NiFi and Kafka to create a workflow able to take in data from a TCP socket and transfer it into ElasticSearch and Hadoop Distributed File System (HDFS). This involved writing two custom NiFi processors in Java for conversion between file formats and setting up a multi-node cluster, managed by Ambari Server, to run the workflow. I then carried out performance testing of the workflow using bash and python scripts to run tests with certain parameters and gather metrics from the Ambari Metrics API. During this project, I was part of a larger development team using the agile development methodology, was involved in their sprints, managed my work through Atlassian JIRA and documented in Confluence. This taught me a great deal about the process of enterprise level software development, and gave me a greater understanding of the importance of making code maintainable and extendable, as well as increasing my level of familiarity with agile development. Technically, this developed my hardware skills as I had to do a great deal of configuring Linux virtual machines and fixing problems assotiated with this, as well as improving my development skills.

Cyber Security Summer School July 2016 - September 2016

I took part in a 10-week summer school over the summer of 2016 to enhance my technical skills. Among the topics covered were networking, secure coding in C/C++ and python, low level operating systems and many aspects of computer security. This school consisted of a combination of learning about cyber security issues and trying both offence and defence using some of these techniques in a controlled laboratory environment using the tools supplied within the Kali Linux distribution by Offensive Security.

Microtek Laboratories June 2014 — October 2014 Assistant to MD

During the summer of 2014 I worked for Microtek Laboratories Inc. This is a US based company specialising in the testing of electronic components. My job was to assist the set-up process of their new UK business, working alongside the Managing Director of Gen3 Systems Ltd (a UK based company with which Microtek has an existing relationship), to handle the customer communication, company set-up and testing services that occurred over this period. I served as the main point of contact between the US head office and the new European customers, and ensured that all required test work was carried out to the highest standard whilst keeping the customers fully informed of our process.

UK-Japan Cambridge University Young Scientist Workshop July 2012

In the summer of 2012, I had the opportunity to take part in the UK Japan Young Scientist Workshop at Cambridge University. This was a week long collaboration between schools in the UK and Japan to take part in research projects with academics. My group examined 'Nuclear Energy and the public perception of radiation' with Professor Wade Allison, a world-leading researcher on the subject. I gave a presentation at the end of the week on our project to the events sponsors and special guests, which was an invaluable opportunity to develop my public speaking and presentation skills.

Young Rewired State August 2012 and August 2013

I participated in two Young Rewired State events in the summers of 2012 and 2013, working in the Reading centre in the offices of Microsoft. These events are designed to introduce young people to the process of software development and after a week of development the event ended with a contest in Birmingham where all the centres came together. This was my first experience of programming and the software development process, and I greatly enjoyed the two projects that saw us create web applications based on open source data.

Interests

I have a strong interest in all forms of technology, and enjoy investigating new developments in both hardware and software in the consumer and professional markets. This interest heavily influenced my decision to take a Computer Science degree, and it is a decision I'm glad I made.

My main hobby is Golf, which I play off a handicap of 13. I enjoy a casual game with friends and family, have played some match golf for Wellington College and Bearwood Lakes Golf Club, and spent 2015-2016 as Captain of University College Golf Club at Durham University.

References

References available upon request.