Helen Christine Harman

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Profile

I am an enthusiastic and determined person, currently studying MEng Software Engineering at Aberystwyth University. At the moment I am a finial year student on track for a first. I have great team work and communication skills gained through group programming projects. I am now looking to gain more work experience.

Key Achievements and Skills

- While at CERN I worked on the testing and quality assurance of control system software. I ran graphical user interface testing nightly. I developed a automated static code analysis tool and a unit testing framework. For these I used Python, JAVA and proprietary programming language called CTRL.
- I work well as part of a team and have shown this by being part of the robotics society and working alongside other students to come up with new ideas. In first year a team of us won 100 Amazon voucher through getting a Roomba and quadrocopter to be controlled through different devices including an Android phone.
- During college I was the student council president and a governor. I helped to organise charity events, listened to what different students wanted and communicated these to the appropriate staff. This helped to develop my organisational skills and my communication skills. I also received the Outstanding Contribution to the College/Community Award 2011.
- I have good verbal communications skills through working in a shop for 2 years and talking to many customers I have developed these skills. I have improved these skills while working at CERN through being a part of meetings and giving presentations. I have also given a short presentation at a BCS (British Computer Society) event and I am a member of the BCS Mid-Wales committee.
- Through the Java programming I have gain knowledge of object-oriented design. For the first year I completed two Java programming modules and achieved 77% for both of these. Within these modules I created several programs and completed a group programming project. I also have used a small amount of Perl, Haskell and Delphi Pascal.
- I also have knowledge of C program through C and UNIX programming module. I have displayed my C programming skills through getting 96% in this module. I have further developed my skills through C, C++ and Java Programming Paradigms module.
- I have developed my knowledge of data storage and querying in the Modelling Persistent Data module, which I achieved 98% in. I was able to use this knowledge in my work at CERN, as I used SQL, XML and XSL. I then built on this knowledge by creating an APEX application.

Education

(2011 - 2016) Aberystwyth University:

MEng Software Engineering: On track for a 1st. Average mark 80%.

(2009 - 2011) Birkenhead 6th form College:

A-Levels: Double Award ICT: BB, Computing: B, General Studies: E. AS-Levels: Physics: D

(2004 - 2009) South Wirral High School:

GCSE: 10(A-C). Mathematics: A, Science: AB, Double Award ICT: Distinction Free Standing Mathematical Qualification (FSMQ): Additional Mathematics: D(worth 10 UCAS points)

Employment

(07/2013 - 06/2014) Johannes Gutenberg University Mainz: Summer Intern

I created a Java interface for Scavenger, a tool for computing sub-algorithms in parallel and sharing the results with dependent sub-algorithms. I built a package for Weka, that allows Weka's cross fold validation to make use of Scavenger. I also wrote a generic hierarchical clustering algorithm to show the befits of using Scavenger.

(10/2012 - 06/2013) and (09/2014 - present) Aberystwyth University: Demonstrator and Ambassador

I helped first year students with their coding skills by explaining aspects they do not understand and help them to debug there code. I check and sign off the worksheets that they complete. While doing this I have to think quickly when solving coding problems and be able to explain different aspects of software development at the correct level of understanding. I have demonstrated in the following areas Arduino, C, Haskell and Java. As an ambassador I show prospective students around and tell them about the University.

(07/2013 - 06/2014) CERN: Technical Student

I worked in the EN-ICE-SCD section. This section provides software and a support service to the experiments for some of the control systems being used. I worked on the testing and quality assurance of this software. I developed testing and static code analysis software. I reviewed C++ code, CTRL code and graphical user interfaces.

04/2009 - 09/2011) Village Newsagent and Off Licence: Shop Assistant (part time)

Within this job I handled money, served customers, helped sort the newspaper deliveries and printed lottery tickets. I handled customer telephone enquiries and I helped to organise the newspaper returns. Through this job I gained skills of communicating to many different people and gain confidence in doing this.

Interests

I enjoy going on short hikes. I have recently visited the Matterhorn and the Swiss Alps. While living in France I lived a short bike ride from Mont Jura and so often went on walks around this area. While at Aberystwyth I have walked up many of the local hills.

During my first year at University I was involved in setting up a robotics society. We worked on creating an autonomous sailing boat and turning remote controlled car into one controlled by different devices. During this year I will continue work on the autonomous sailing boats.

I have an interest in music and while at school I played the violin. I have played, in groups in many different places including Liverpool Philharmonic Hall, Anglican Cathedral in Liverpool and New Brighton's Floral Pavilion. I also performed on music tours in Italy, Austria and Czech Republic. I have also started to teach myself to play the guitar.

References

References available on request.