Personal Statement­­­­

I am a second year student at Exeter University, reading Computer Science. Most of my academic experience is in Java with exposure to C, C++, Python, Microsoft Visual Basics and Haskell. I also have industrial experience in web design and mobile application development using HTML, CSS and Javascript.

I have used Java extensively as its versatility makes it ideal for University projects as well as being essential in industry. While it does have its rough patches, *(example)* I find Javascript very enjoyable to use. Using jQuery with HTML and CSS allows me to be creative and have an almost tangible end result, which I find very rewarding.

I spent the summer of 2014 working for Harlequin Computing Solutions, creating a mobile phone application that puts cyclists in touch with each other when they need help with a broken spoke or puncture. We used a technology called Cordova, which allows web applications to be run as a cross-platform mobile application.

Education

Alton College: A Levels

*September 2011 – June 2013*

|  |  |
| --- | --- |
| Computing | A |
| Mathematics | A |
| Further Mathematics | B |

*Skills learnt:* Pascal, Windows Visual Basic

It was at Alton College that my interest in computer science was sparked, inspired by my tutor. I had not studied the subject before but I picked it up very quickly and it soon became by favourite subject. I learnt to program using Pascal, which as a strongly typed language with no exception handling or modern IDE taught me to have an eye for detail from the start. In my second year, our project was to write an application complete with user interface in Microsoft Visual Basic. This was a nice introduction into how to construct larger systems.

Exeter University: Reading Computer Science

*September 2013 – Present*

*Skills learnt:* Java, JUnit, Java Threading, Java Design Patterns, C, C++, C#, Objective-C, Python, HTML, CSS, Javascript, PHP, Functional Programming (Haskell), Logic Programming (Prolog), SQL, git, Test-Driven Development, Agile Development (Scrum), Pair Programming, UML, Formal Specification (Z), Network Architecture and Protocols.

I studied Computer Science and Mathematics in my first year and received a first and was awarded the Dean’s Commendation for my results. In my second year I decided to focus on Computer Science, as this is where my real passion lies; so as of September 2014 continued without Mathematics modules.

Raspberry Pi’s

I have been appointed the Treasurer for Exeter University Computer Science Society and am also on the committee for the university’s Real Ale Society.

Java, C, C++, C#, Objective-C, Python, HTML, CSS, Javascript, Ajax, Server-Side Programming in PHP, Functional Programming (Haskell), Test-Driven Development, Pair Programming, git, JUnit, UML, SQL, Linux Operating Systems, Networked Computer Architectures, Network Protocols, Understanding of Data Structures and Algorithms, Java Threading, Java Design Patterns, System Architectures, Agile Development Process (Scrum), UI Design and Prototyping, System Modelling, Software Maintenance, Software Reuse, Project Planning and Management, Formal Specification (Z), Logic Programming (Prolog), FSA, Database Normalisation, Philosophy and History of AI, Application and Consequences of AI,

Skills

Java

I have used Java extensively as its versatility makes it ideal for University projects as well as being essential in industry.

JUnit

Threading

Design Patterns

Javascript

I really enjoyed spending the summer learning Javascript for a small mobile/web application. I find procedural languages very fun and easy to work with which is why I enjoyed using Python during my first year (an excellent teaching language), coupled with the creative aspects of HTML and CSS, which I also enjoyed with Visual Basics while still retaining a certain amount of challenge for example comprehending closures.

jQuery

Programming Paradigms

Misc

Employment History

Harlequin Computing Solutions

*Full time: June 2014 – September 2014*

*Skills used:* HTML, CSS, Javascript, jQuery, git, Java, Extreme Programming, Test-Driven Development, Pair Programming, Cordova, iOS Development, Android Development, use of APIs.

*Role overview:* Help theorize, design and implement mobile phone application for cyclists requiring assistance. Researched and analysed which technologies to use. Wrote a lot of the code base for the mobile phone application using HTML, CSS and Javascript. In particular used native APIs to use the devices map application from within ours. I exercised the extreme programming paradigm and got accustomed to using test-driven development and pair programming as well as being given a task to work on alone for a day or two.

*Interesting challenges:* As my first experience working in industry it was a steep learning curve. I was used to solving problems to which I already knew how to solve to having to deal with problems that had no certain solution. I also was learning Javascript while working.

References

Duncan McGregor

*Company: Harlequin Computing Solutions*

*Mobile Phone: +44 7811 276953*

*E-Mail Address: duncan@oneeyedmen.com*