

Matthew Philip Care

Personal Profile

A highly motivated, enthusiastic computer science graduate, with a passion for the computing world. Able to work well as part of a team, as well as individually.

Relevant Skills

Technical

- Programming experience in **Python**, **PHP**, **Java**, and **Haskell** - projects undertaken as part of my university coursework include a cardboard box ordering system, and a program that drew different shapes in a patchwork pattern.
- Competent web developer, with experience in **Javascript**, **HTML5**, and **CSS3** - created an e-portfolio as part of a university coursework, as well as personal websites.
- Experience utilising third party APIs - used the **Web Audio** and **WebGL** APIs as part of my university degree.
- Proficient GitHub user - used frequently for most of my university work, as I find the ability to track the different versions of my work very useful.
- Familiar with Windows, OS X and Linux / Unix operating systems

Interpersonal

- Teamwork - extensive experience with working in, as well as leading, teams of varying sizes.
- Communication - able to quickly convey information and instructions in a decisive manner.
- Problem solving - constantly searching for new ways to solve problems and making processes more efficient.

Education

University of Portsmouth

2011 – 2014

BSc (Hons) Computer Science

Second and third year units:

- Introduction to Software Engineering - Learnt how to deliver presentations effectively, as well as the importance of ensuring the design and specification is completed correctly before attempting to write a piece of software.
- Advanced Programming Concepts - Designed and created object oriented programs in Java.
- Data Structures and Algorithms - Making certain decisions, such as ensuring my algorithm is as efficient as possible is very important, and needs to be taken into consideration whilst programming. I have used this knowledge when implementing a binary search tree in my functional programming work to make it more efficient.
- Web-script Programming - Improved my skills in designing a product to be user friendly, and how to add a lot of functionality but make the features easy to use, such as using AJAX to dynamically populate pages.
- Final Year Engineering Project - Choosing an area of my choice, I created a web application that helped with the learning of music theory, as well as writing a report on the design, specification, a review of literature, and notable events.
- Computer Operating Systems and Intermediate Networking - How to create and maintain an efficient network, and simulate them using OPNET.
- Applied Computer Graphics and Vision - Created a traffic control system using MATLAB which flagged speeding, or oversized vehicles. Also used the WebGL API in order to create a rotating 3D Earth model, with an orbiting satellite.

- Distributed Systems and Parallel Programming - Learnt article writing as well as programming to utilise more threads, processors, and networked computers. Using this knowledge I created, and then parallelised a program that multiplied matrices.
- Security and Cryptography - Using OpenSSL I was taught about the security of systems, and the different sorts of attacks a system can be vulnerable to. A lot was also learnt about ciphers, and different encryption methods.
- Theoretical Computer Science - Many theoretical elements were learnt here, such as: computability, equivalent models, diagonalisation, the halting problem, decidable and undecidable problems, and the problem of $P \neq NP$.
- Discrete Mathematics and Functional Programming - I've learnt a lot about how mathematical concepts relate to computer science; for example how graph theory is relevant in networking.

Castell Alun 6th Form

2009 – 2011

A Levels: Physics, Computing, Maths

AS level: Design and Technology

Completed the Welsh Baccalaureate (equivalent of an A at A level)

Achievements

One of the requirements for the Welsh Baccalaureate was 30 hours of voluntary work, which I decided to continue with afterwards, achieving further awards for my outstanding services to the community. I helped run a twice-weekly after school club, for about 50 secondary school pupils, distributing food, and assisting pupils with homework. I was also part of a student mentoring scheme, enabling me to work with students with learning difficulties.

Taken part in a 'Dragons Den' like competition, where I, as part of a team, had to propose an idea for a charity event and then present the idea to a group of entrepreneurs, who would then help fund the winning team's event.

Castell Alun High School

2004 – 2009

11 GCSEs Including Maths, English Literature and English Language

Work Experience

Gap personnel

June 2012 - September 2012

Sharp Manufacturing UK Solar Division Operative

During my time here, I was able to experience a variety of different roles within a factory environment, as well as working long 12 hour shifts, during days and nights. I found it an excellent first hand lesson on how completing your job to a high standard, and efficiently, will cause less problems, and enable more productivity, whilst working on the production line.

PC World

Sales Team / Tech Guys

May 2010

I undertook this placement as part of my 6th form's work experience scheme, and during my placement I learnt a lot about retail, and how to perfect my customer service skills. I was also given the opportunity to be a member of the Tech Guys team, where I got to show off my knowledge of computer hardware repair, as well as how to tackle software issues.

Her Majesty's Revenue and Customs***May 2008***

This placement was part of my school's work experience programme. On this placement, I was given the chance to work with sensitive data, changing the personal data of residents. I also worked with a complex paper based file system, which I was given the task of organising, and sorting.

Interests and Activities

- With self-motivation I have taught myself how to use Photoshop, and have also created and designed websites, such as my personal website: www.matthewcare.co.uk
- I am also an avid computer enthusiast, and have built many computers, for many people, including myself.
- During studies I was a member of the University of Portsmouth rock climbing and mountaineering society, as well as being a member of the computing society.
- I enjoy playing piano, which has been an important recreational hobby of mine for many years.