Josh Smith

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™ www.qinusty.co.uk www.gitlab.com/qinusty

Overview

I am a final year Software Engineering student at Aberystwyth University; graduating in 2019, I hope to place myself within a challenging role in an ever changing industry. Following my first two years at University which I averaged a first, I aim to challenge myself and focus on areas which I lack experience.

Skills

Programming Python, Java, C, C#, C++
Languages

VCS git, Subversion
Databases Postgresql, MySQL

Operating Linux, Windows
Systems

Other Docker, ARM Cortex-M
Technologies

Examples of these skills can be found below in the Projects section.

Personal Projects

All of these projects and more can be found through my github at www.github.com/qinusty

2017 Buccaneer (University Group Project) - Java.

This project was part of a second year module at University, I was part of a group of 8 tasked with designing and developing the Buccaneer board game in Java with a JavaFX user interface. Here I gained my first experience architecting a software system to be developed as part of a group.

2016 **Telnet Game Server (Group project) - Python**.

This was a group project I was involved in over the Summer during my Cyber Exposure course. We were put into groups of four and told to make a modular project where everyone could get involved, regardless of prior programming experience. It was a 3 day project and has 6 completed games playable from a telnet client. My job was to implement multi-threading, sockets and JSON serialisation to allow the games to run smoothly on the server and have all of the functionality requested by my group members.

2016 Crypt-Chat - Python, Postgresql, git.

This project follows a client server model for an end to end encryption solution for messaging, this works via RSA Asymmetric key encryption where clients generate their keys and provide the server with a public key to pass onto other clients. The server uses a postgresql database to store the users name and password hashes for persistent accounts.

2016 Multiplayer Battleships - Python.

This project was a small networked project for me to get to grips with python sockets. The project allows two users to connect and take turns against each other playing console battleships.

Education

Aberystwyth University, Aberystwyth - Currently Studying

2015-present **BEng Software Engineering**.

First Year: 1st Second Year: 1st

Aquinas College, Stockport

2013–2015 Computing, A Level, B.

IT BTEC, Level 3 BTEC, Distinction*.

Mathematics, A Level, D.

Stockport School, Stockport

2008–2013 **9 GCSE's A* - C**, including Maths, Science and English.

Interests

Badminton Over the past year I have taken up playing badminton in my free time to keep active and spend time with friends and colleagues.

Travel I enjoy traveling when I get the chance, most recently I traveled to Belgium in early 2018 with a few other students to attend an open source developer conference (FOSDEM). Over the past few years, I have attended the conference and have been impressed with the wide variety of talks given each year.

Experience

Codethink Ltd - (July 2018-September 2018)

Following my year in industry, I started a two month placement in Manchester. During my time at Codethink, I was able to work along side other passionate software engineers from a variety of backgrounds. I primarily worked on an open source project called BuildStream, a build and integration tool written in Python and hosted on Gitlab. While working on this project, I gained first hand experience in using Gitlab CI to help ensure stability of the master branch. My experiences working on the project has encouraged me to embrace the open source community and appreciate the amount of support they can provide. This project has given me an insight into working on larger systems with a variety of critical components. The project can be found at https://gitlab.com/BuildStream/buildstream

Year in Industry - DCA Design International Ltd - (July 2017-July 2018)

After my second year of studies, I worked as a software engineer alongside Electrical and Mechanical engineers to develop products for a variety of clients in a range of sectors from Consumer to Transport. My role primarily involves me writing code for embedded systems while also including work with Bluetooth LE and android applications. This placement has provided me with invaluable experience working throughout a software development life cycle, from writing requirements to writing code.

I have gained experience independently developing a system to a set of requirements while also having had experience working alongside experienced software engineers to develop and test firmware for embedded devices.

Summer Intern - HMG Cyber Exposure - (Summer 2016)

During my 6 weeks on the Cyber Exposure summer course I worked on a variety of skills, we started with building up virtual machines to set up a network configured to run various services such as DHCP, FTP and a Web Server. Further on into the course we touched on Social Engineering, Programming and Pen Testing. The programming section allowed me to work on a project which I mentioned above (Telnet Game Server) within a group of individuals with various backgrounds.

Student Demonstrator - (October 2016 - Present)

I am currently employed by the University to help first year students in the Functional programming and introduction to programming modules. This role has given me the opportunity to help first year students gain the knowledge and understanding they will need to complete their assignments.

Robotics club volunteering - (March 2016 - Present)

I have been volunteering at the local high school robotics club which has weekly sessions in our physics department where I help students between the ages of 11 and 16 work on a variety of robotics projects.