JOHN JACOB (JAKE) HEARN

Jojah.onrender.com 🏠
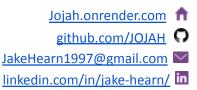github.com/JOJAH ⬤
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OBJECTIVE

My recently completed Computer Science MSc, including a placement year in a Cyber Security Company, gave me a great introduction to my software Developer career, granting me excellent QA technical experience and a great base understanding of networks, their architecture, security, and major threats. I already have a strong bank of technical skills and have, through the placement and my own development work, proven myself quick and able at adapting and adding to these as specific needs require. I am now looking to take the next career and get exposure to different aspects of development, expand my workplace experience, collaborate with others, and input helpfully to the execution of projects. I am hard working, sensible, and enjoy working as part of a team.

RECENT WORK EXPERIENCE

Placement with AWEN Collective | AWEN Collective | June 2022 – June 2023

Placement at AWEN Collective, a cybersecurity company specialising in providing full asset discovery, analysis and management, with a focus on OT(Operational Technology).

My responsibilities included:

QA: I led the task to find the testing framework most suitable to our requirements, which could provide 100% test coverage and be implemented into the product's deployment.

Creation of Automated Tests: I created and managed thorough, scalable, and reliable e2e tests for AWEN's product Dot, ensuring all code deployed was bug free.

Incorporating the Tests into Dot's code deployment in AWS: Working with a senior developer, I ensured the tests created were run during the deployment of Dot's code, streaming the testing process, ensuring releases were error free.

Writing a White Paper on OT Cyber Security in Food and Beverage Manufacturing: I researched and produced a white paper on a sector important to AWEN. This was published on AWEN's website, linked to in newsletters and distributed in printed form at conferences.

Writing blog posts on Cyber Security related subjects: I researched and wrote blog posts for AWEN. These blogs were relevant to various OT cyber security related topics, and helped raise AWEN's web presence on a range of topics.

Conducted target market research: I identified prospective clients for the sales team, providing a brief on each prospect.

TECHNICAL SKILLS

Languages: JavaScript, Python, JSON HTML, CSS. lesser: C# , Java.

Web Development Technologies: D3.js, Node.js, Flask, Jinja. Lesser: React.js

Quality Assurance Tools: Cypress.

Networking Tools: WireShark, Scapy.

DataBase tools: SQL, SQLite, MySQL.

Version Control: Git.

Project Management Framework: Agile, Scrum.

General Tools: VirtualBox, AWS suite, Visual Studio, VSCode, Auto-CAD, Unity, Microsoft Office Suite.

INTERESTS

I am a keen cyclist who enjoys cooking, comedy, woodworking and gaming, setting up personal servers for myself and friends to play together.

PREVIOUS WORK EXPERIENCE

Barista with operational responsibilities | Short and Tall Coffee | 2020 – 2021
Construction Project Management Support | ECCONE Project LTD |2021
Barista | Maggie and Rose | 2015 – 2017
Various voluntary roles | 2016 – 2020

EDUCATION

Computer Science MSc | Cardiff University | 2021 – 2023
Grade: Merit

Historic Building Conservation BSc | Kingston University | 2016 – 2019
Foundation Degree, converted to *Bachelors' Degree* in *Historic Building Conservation*
Grades: Foundation Degree – **Merit**; BSc – **2:2**; Bench Joinery (additional study) - **level 3 diploma**

PROJECTS (MOST CAN BE FOUND ON MY **WEBSITE** OR **GITHUB**)

Network traffic analyser and Visualisation: This project takes network traffic scans in the form of PCAP files, analyses and visualises the devices, their connections, and protocols. The visualisation also allows for user interaction to create a more unique display of the information relevant to specific users. This can be found here.

Automated Assessment Tool: Working as a team deploying an AGILE/SCRUM methodology, we designed and created a dynamic web application that produces exercises for students, providing them with feedback and giving teaching staff a summary of individual students and classes as a whole. The tool creates unique user experiences based on who was using the tool, and their relevant modules.

Listed Building Visualisation: Here I created a tool to visualise the breakdown of England's historic listed buildings dates and grade listing. I did this initially to improve my D3.js skills, however I also decided to further my recently learnt Flask, Jinja, and SQL skills so I made the visualisation load dynamically, pulling all its information from databases I created. This can be accessed here (will initially take a minute to load as it is being hosted for free).

Jektris: I wanted to further my web development skills, especially with user interaction. Therefore, I decided to recreate a favourite game of mine Tetris with some additional features. This can be found here.

Randomised Circles: I wanted to further my user interaction with D3.js elements. So created an interesting visualisation which allows users to change aspects of. This can be found here.

Personal Site: The majority of my web projects can be found on my website, they are focused on creating interesting, unique projects which encourage user engagement. This can be found here.

Site and Application Deployment: Following my involvement deploying AWEN's product to AWS, I have deployed my own personal website and web applications.

Hosting and Maintaining Gaming Servers: I have set up, hosted, and maintained a few gaming servers locally for mates and I to use.

Various Small Quality of Life Projects: I've made a few small projects to help out in everyday life such as converting measurements, and script for video game calculations.

ONGOING PERSONAL DEVELOPMENT

Learning: Continuously learning and developing my skills is very important to me. Currently I am improving my node.js, react.js, C# and .net skills.

Programming Challenges: Frequently participating in code challenges to improve my programming skills, this is continued through attempting challenges on Codewars and participating during Advent of Code*.*

In Person Events: I have taken part in multiple Capture the Flag and Game Jam events with friends to apply and further develop my learnt skills.

Woodworking Projects: I set up my own workshop, creating designs to undertake professional and personal projects for friends and family.