

PROFILE

As a highly motivated Cyber Security university student over the past few years I have developed a passion for security and programming. I am reliable and cooperative through experience working within a team during events such as ESCS 2019 F2F CSC, CyberStart Elite and Codewars. Through obtaining 2 SANS certifications and ranking 26th in the UK on the HackTheBox platform I've continually learnt and solved large complex problems based on realistic engagements. I've gained proficient communication and relationship management skills through working with clients frequently as a freelance website developer for the past 2 years. Due to my interests I've gained knowledge of offensive tools and techniques needed to solve CTF challenges and HTB boxes. Within my degree I've gained more knowledge around Networks and their protocols, discrete mathematics allowing me to learn the math behind cryptographic principles, assembly language and use of programs like radare to reverse engineer and exploit vulnerable applications.

EXPERIENCE

2018 - Present : Freelance website developer

- Developed websites for local choirs, bands and businesses. Ranging from static sites to ecommerce and custom content management systems.
- Sat down with clients, showcasing them designs and themes to inspire them and then designing a mockup before development.
- These websites range from being developed purely in HTML, CSS and Javascript to being developed using Django, with one project relying on AJAX to communicate with a Flask based API to create a dynamic Admin Dashboard.

2020 - CyberStart Elite

- 2 Week long online course teaching us **SANS SEC503** - Intrusion Detection In-depth. Said course included networking, packets, wireshark, tcpdump and programming using Snort and Zeek.

2019

- **ECSC 2019 F2F CSC UK**
 - Qualified via online qualifications, consisting of pcap file analyses and a pentesting engagement.
- Shadowed a Junior Penetration tester for 3 days, learning what the job entails.
- Cyber Discovery Elite Lancaster, Attended CD Elite Lancaster, undertaking the **SANS SEC504** course with a full six days of training, 'Hacker Tools, Techniques, Exploits, and Incident Handling'.
- CyberFirst Advanced - Week long residential which taught us these topics; digital forensics, OSINT and Penetration testing.

2018 - CyberFirst Futures

- Week long residential which taught us these topics; networks, protecting networks and network attacks.

2017 : CodeWars

- A programming competition where my time and I placed 3rd out of 27 teams, solved problems using python and learned to read and utilise documents for libraries.

2015 - 2016 : Freelance Minecraft plugin developer

- Developed bespoke plugins written in Java for Minecraft Servers.

SKILLS

- Advanced knowledge in Python, C#, C, JS and Bash.
- Skilled in working with database management tools such as MySQL.

- Deep understanding of website development ranging from HTML, CSS, JavaScript, Django and Flask.
- Deep understanding of the Linux operating system with an emphasis on Bash and the ability to utilise bash to automate tools and processes.
- Experience with the Github workflow and team collaboration.

EDUCATION

University of Warwick – 2020 – 2023 – Cyber Security (BSc)

Queen Elizabeth Sixth Form College, Darlington – A level – 2018 – 2020

Qualifications in Computer Science (A*), Maths (A) and Physics (A)

Teesdale School, Barnard Castle – Secondary Education – 2013 – 2018

GCSE qualification in Computer Science (7), History (8), Maths (8), Physics (8), Chemistry (7), Biology (7), English Literature (7), English Language (7).

CERTIFICATIONS & AWARDS

2020 - GCIA Certified Intrusion Analyst (GCIH), Certification, Global Information Assurance Certification. November 2020

2019 - GIAC Certified Incident Handler (GCIH), Certification, Global Information Assurance Certification. September 2019

INTERESTS

- Frequently participate in CTF's like PicoCTF where I've developed my binary exploitation and reverse engineering skills.
- Refining my penetration testing skills through HTB and report writing abilities by releasing a few writeups on my blog. During summer I was doing HTB on a daily basis, completing Web challenges, pwn challenges and forensic challenges resulting in ranking **26th** within the UK.
- Run a Cyber Security Club. I share my knowledge and endeavor to teach my peers the skills needed to solve problems independently. Attempt to do this by walking them through various CTF challenges and allowing them to try the vast range of topics within Cyber Security.
- **EyeStat** - Python programming project which I used Django to produce a dynamic website that showcased statistics around teams. Features of said website included a Live Leaderboard, custom built signup and authentication system. Backend of the website was built on a Python API which utilised requests, beautifulsoup, regular expressions and communicated with MySQL database allowing me to become more comfortable with SQL like syntax. Alongside the project I wrote a 260 page report and 70,000 words which explained the development process, research process and continued feedback through the development stage. Said project ended up with around 5,000 lines of code. This project taught me how to document effectively, comment code to an extent where my client could understand my thought process.
- **StratRoulette** - C# programming project where I developed a Discord bot which used POST requests to communicate with an API containing all the strategies needed, the POST requests had various parameters which were influenced depending on the commands used by the user within discord. This project improved my ability to read and utilise documentations around the C# Discord API. I also helped develop the backend aspect of the StratRoulette website which utilised the .NET framework.
- **The Esports Toolbox** - A Django based project for a client. Created a bespoke website from scratch heavily using Django's ORM system, the website had many features such as specific users being able to create posts within a live markdown rendering engine, post filters and many other features. From a security standpoint it allowed me to learn about IDOR's and authorisation in detail.
- **depp** - A dependency security checker tool which I'm currently developing with a few individuals creating detailed documents alongside the tool. The goal of the tool is to check for broken dependencies on software projects and then hijack them. Mainly written in C, Python and Bash.