Nick Ruffles

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 github.com/TheDarthMole ⬡ app.hackthebox.com/users/73260 📍 Sheffield, United Kingdom

Professional Experience

08/2022 – present London	**Cloud Native Software Engineer,** *Engineer Better* 🔗 Migrating existing applications into robust and scalable solutions hosted on the cloud utilising best practices and CI/CD pipelines. I also contributed to open source projects such as <u>External Secrets Manager (ESO)</u> 🔗
08/2021 – 09/2021 Sheffield	**Software Developer,** *University of Sheffield* Developed a post-graduate research system for the Department of Engineering that has been **deployed within the university**. Assumed the role of lead backend engineer and security for a team of 5. I **achieved** a secure implementation of a production environment with **continuous integrations**, **SSL and 2FA.**
07/2016 BT Adastral Park, Suffolk	**Software Developer work experience,** *Brittish Telecom (BT)* Assisted a **team** of software developers to complete an **Internet of Things** Smart Home software product for clients, attended and presented at weekly meetings.
07/2015 BT Adastral Park, Suffolk	**Shadowing software engineer,** *Brittish Telecom (BT)* A 2-week work placement working with **IoT devices** while shadowing a software engineer. Designed and implemented a beautiful front-end website, later demonstrated during team meetings.

Extracurricular

04/2020 – 05/2022 University of Sheffield	**President of Sheffield Ethical Student Hackers Society,** *University of Sheffield* • **President** - April 2020 - May 2021 • Vice-President - May 2021 - May 2022 A strong **leader** of a successful society for two years, with over **70 members**. I taught basic and **advanced penetration testing** techniques and methodologies in weekly sessions, while also promoting cyber security. As president, I **delegated tasks**, scheduled and **organised sessions** while also **presenting** them to members. **Collaborated** with **Industry Leaders** and other societies.
2019 – 2022 University of Sheffield	**ShefJam7 and 8,** *Game Hackathon at University of Sheffield* Attended two ShefJam hackathons aiming to build a game in **48 hours**. The first year my team and I built a game using PyGame and the second year I **learnt C#** in **Unity** for a racing game on a Mobius strip.

Projects

Home Lab Server, *A secure multi-purpose application stack*
Created and managed a lightweight, fully containerised and **load-balanced** server with networking and IP rules, full **end-to-end SSL encryption** and **DNS** resolving. There are currently 16 services in the application stack, all with aggregated **metrics for analysis** and **visualisation**. The next evolution of the server is implementing **k3s Kubernetes** and buying a dedicated pfSense firewall and router.

PwnAdventure3 Game Hack, *A challenge by Ghost in the Shellcode 2015 (GitHub)* 🔗
PwnAdventure3 is a game that was made for a Capture the Flag event, where the objective was to **create game hacks** in order to allow you to progress. The hack included modified speed, flying capabilities, infinite ammo and teleportation. It was made by **patching assembly instructions** using the **C++ programming language** and injecting the new instructions into the game via DLL injection.

Bookmarks Manager, *Manage your bookmarks with tags (GitHub)* 🔗
Built with Sinatra for Ruby, the bookmarks manager allows sorting, filtering and tagging of bookmarks. It is accessible through a web interface making use of **Bootstrap 4**. Made in order to **learn Ruby**.

Education

2019 – 2022 Sheffield, United Kingdom	**Software Engineering BEng,** *University of Sheffield* A First-Class level student. Relevant modules include Machines and Intelligence, **The Intelligent Web**, **Software Reengineering**, Automata Computation and Complexity, Systems Design and Security, Algorithms and Data Structures, **Security and Forensics** and Data-Driven Computing**.** **Engineering you're hired** (EYH) **-** An Engineering department project Engineering Department project working in teams comprised of students from different disciplines, to **produce a solution** to a taxi problem in Cape Town. Our solution was financially viable and was **presented** to **industry experts** at Dyson.
2017 – 2019 Suffolk, United Kingdom	**A Level,** *Farlingaye High School* Computer Science: B Mathematics: B Business: Distinction

Skills

BOSH / Cloud Foundry ● ● ● ○ ○

Kubernetes ● ● ● ● ○
Working towards the CKA certificate

Linux, Bash and Git ● ● ● ● ●
Daily drive an Arch Linux Laptop

Agile methodology ● ● ● ● ○

Programming Languages ● ● ● ● ○
- Python, Django   - Ruby   - SQL
- Ruby on Rails, Sinatra - Golang   - Javas
- Javascript, NodeJS   - C/C++   - Assembly

LaTeX ● ● ● ○ ○

AWS / GCP ● ● ● ● ○
Deployed multiple apps using Terraform. Working towards AWS Certified Practitioner

Terraform ● ● ● ● ○

Docker ● ● ● ● ●

SCRUM methodology ● ● ● ● ○

Networking ● ● ● ● ○
Working towards the CCNA

Interests

HackTheBox & TryHackMe
I use HackTheBox and TryHackMe to learn new hacking techniques and brush up on existing skills.

Sports
I'm interested in Sailing (Completed RYA Sailing certificate) and Climbing.