

Aidan Laurence McDonagh

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EXPERIENCE

SKY | SOFTWARE ENGINEER (SECURITY)

Feb 2022 – Present | Brick Lane, London

- Static Security Analysis Testing of projects
- Software Development Lifecycle Security Integrations
- Deployments with Blue-Green Deployments for production code

UNIPART DIGITAL | SOFTWARE ENGINEER (SECURITY)

Nov 2020 – Dec 2021 | Cambridge, Hertfordshire

- Maintaining multiple repos, keeping packages updated and secure by fixing vulnerabilities, and code analysis to prevent supply chain attacks etc.
- Ansible script creation to puppeteer multiple systems throughout the CI pipeline in Jenkins whilst increasing Ansible script efficiency
- Race condition identification, mitigation and testing
- Creation and maintenance of a Full-Stack Security SPA for Device Authorisation and Authentication using Django (DRF), PyJWT (JSON Web Tokens), Postgresql, React, Webpack, Docker-Compose, Ansible & Jenkins.

KHIPU NETWORKS LTD. | DEVSECOPS ENGINEER (FULL-STACK)

Jan 2019 - Nov 2020 | Fleet, Hampshire

- App Security as a Penetration Tester, Packages Maintenance and Attack Mitigation
- Real-time Monitoring System for Switches & Routers in order to prevent downtime and malicious attacks as a Full-Stack Event/Message Driven SPA (Single Page App) using Angular, Node.js (Fastify), Socket.io (Websockets)
- Built a script to analyse data from Vulnerability Scanners Outputs (OpenVAS) using Python
- Engineered an Internal Staff Mobile App (Hybrid) using React Native for heat mapping, room calendar bookings, notifications and physical RFID/NFC lock entry

EDUCATION

THE UNIVERSITY OF PORTSMOUTH

BACHELOR OF SCIENCE (HONS.) SOFTWARE ENGINEERING

Classification: 2:1

- In my System Security Module I was taught the basics ethical hacking. I had a module on passive enumeration of vulnerabilities in the supply chain of a supermarket and how much damage could be done with current vulnerabilities. I managed to write an essay displaying vulnerabilities in SCADA could cause multi-million pound damage and also how to remediate such vulnerabilities. I was also taught the basics of NMAP and low-level Memory Exploitation on computers.
- I was also taught Security & Cryptography meaning I have full understanding of asymmetric/symmetric cryptography, encoding, hashing and encryption/decryption tools, techniques and exploits.

OFFENSIVE SECURITY - PWK 200

- I learnt about the mindset & methodology of a pen. tester, most of the tools provided on a Kali Linux system and how to use them, and also enumeration/exploitation/evasion techniques.

SKILLS

PROGRAMMING

Over 150,000 lines each:

Python/Django • TypeScript/Node.js/Deno • JavaScript/React/Angular

Over 10000 lines each:

Bash • Java • Haskell

PEN. TESTING

Skills:

OSINT • Black/White Box Testing • Social Engineering • SAST/Source Code Review • CI/CD & SDLC Security Integrations • Reverse Engineering • Exploit Development • Executive Reporting & Documentation

Tools:

NMAP/Nessus • Metasploit • Burpsuite • Wireshark • Hydra

General:

Hacked over 300+ Computers (Linux / CentOS / Solaris / Windows / Android)

CERTIFICATES

Offensive Security

OSCP PWK 200 - Course taken, Exam Booked

CompTIA

PenTest+ - Achieved on 14th May 2022
Security+ - Achieved on 26th June 2022

UNIVERSITY MODULES

Computer Networks • Database Design and Development • Discrete Mathematics • Computer Architecture • Data Structures and Algorithms • Advanced Programming Concepts • Advanced Software Engineering • System Security • Security and Cryptography • Reliable and Secure Systems

EXTRA CURRICULAR

Project Euler's Math Problems
LeetCode/HackerRank (Algorithms)
HackTheBox (Penetration Testing)
TryHackMe (Penetration Testing)
IBM's Quantum Experience
IBM's Security Course
IBM's Blockchain Course