



Jonah McElfatrick

Cyber Security
Specialist

How to reach me:

Mobile:

07795100884

Email:

jmcelfatrick@gmail.com

Address:

9 Lilybank Mews, Dundee, DD46EQ

Linkedin:

[@JonahMcElfatrick](#)

GitHub:

<https://github.com/Jopo97>

Website:



Personal Profile

Solution minded Ethical Hacker, skilled at using various hacking methods to determine system safety, threats and/or weaknesses. Passionate computer enthusiast with a keen eye for detail. Natural interest in all mathematics and computers. Advanced knowledge of computer hardware, software and how computers interact with each other over a network. Experience in computer building and maintenance. Experience working in multiple teams to bring projects together as a team leader. Works efficiently to maintain a high standard of work while keeping up to date with relevant tasks. Able to keep calm and concise under pressure. Very good numeracy and problem solving skills.

Education and Qualifications

Abertay University

First Class BSc (Hons) in
Ethical Hacking

- Attended from Sept. 2017 to June 2021
- Member of the Ethical Hacking Society
- Awarded the Mars Prize Award for best overall student in second year Ethical Hacking.

Madras College

May 2015 - National 5

- Chemistry - A
- Computing Science - A
- Engineering Science - A
- English - A
- German - A
- Mathematics - A
- Physics - A

May 2016 - Scottish Higher

- Chemistry - A
- Computing Science - A
- English - B
- Mathematics - A
- Physics - A

May 2017 - Scottish Advanced
Higher

- Computing Science - B
- Mathematics - A
- Mathematics of Mechanics - A
- Physics - B

Certifications

- [AWS Academy Graduate - AWS Academy Cloud Foundations, Issued Dec 2020](#)
- [Short Leadership Course by ASDAN \(Award Scheme Development and Accreditation Network\)](#)

Career Summary

Summer Intern

Informit Systems

June 2017 - August 2017

- Worked in a team to solve everyday issues with computer systems.
- Solo project using filemaker to create a new ticketing system for support requests.

Cyber Security Analyst

Waracle Ltd

August 2020 to February 2022

- Run security and compliance checks in order to provide evidence for compliance standards.
- Automating auditing processes in order to increase efficiency.
- Analysing possible security risks within the company and how these can be mediated.
- Managed virus protection systems based on computer virus reports.
- Control and monitor user access and privileges to systems.
- Implemented security response frameworks.

Malware Research Analyst

ClamXAV

February 2022 to present

- Analysing software for malware patterns to determines anti-virus rules.

Experience

Knowledgeable in the following areas:

- Analysing system security risks to identify and implement appropriate security countermeasures.
- Web-based Penetration Testing
- Digital Forensics including Mobile, Network and Desktop Forensics
- Web Development and Deployment
- Windows System Exploitation
- Cloud Development and Security
- Secure Coding Practices
- Keen interest in data encryption and hashing methods for securing data at rest and in transit
- In-depth knowledge of Windows/Linux/macOS systems
- Basic understanding of machine learning and AI.
- Experience using and automating different interactions and calls to a variety of different API's.
- Reverse engineering android applications in order to find security vulnerabilities in the applications code.

Professional Skills

Coding Languages:

Python, C++, HTML, CSS, PHP, SQL, JavaScript, Google Apps Script, Windows and Unix Command Line including bash scripting

Frameworks/Systems:

Windows/Linux/macOS systems
AWS, Visual Studio, Android Studio, GitHub, Atlassian Suite, Microsoft Suite, G-Suite

Hobbies

I enjoy a number of hobbies in my free time. I spend my time playing video games, watching movies and TV shows as well as reading up and researching the latest developments in computer hardware, software and security.

I enjoy tinkering and building computers for myself and friends.

I currently hold a 1st Dan senior black belt in Kickboxing in addition to a 2nd Dan junior black belt over the course of 14 years of commitment to the sport.

I also enjoy reading fictional novels.

I previously tutored both National 5 Maths and Physics.

Previous Projects

Reports/Papers:

- The Mathematics of Public Key Encryption
- Forensic Investigation into the case of John Doe
- Windows Server 2000 White Box Penetration Test
- Web Application Penetration Testing
- Storing and Transmitting Data Securely
- Network Mapping and Security Evaluation
- Network Forensic Investigation
- How Mobile Device Security is Challenging Law Enforcement
- Secure Coding Development Practices
- Artificial Intelligence and Network Packet Classification
- Human Centered Security
- Web Viewable Camera
- Development and Interrogation of a Mobile Forensics Testbed for Educational Use

Development/Implementations:

- Boyer-Moore
- Rabin Karp
- Rabin Karp Multi-threaded
- Password Cracker
- Multi-threaded Password Cracker (MD5, SHA-224/256/384/512)
- Android Password Manager