

Joshua Limbrey

INFORMATION SECURITY · CRYPTOGRAPHY · SOFTWARE DEV

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A technically adept, complex problem solver with a proven capability for the highest performance, combining a mathematical background in cryptography and group theory with a strong passion and competency in computer science and information security. Enjoys and is driven by creating innovative solutions to complex problems and challenges, improving efficiencies, and tackling issues in a stimulating and highly capable team environment. Equipped with robust analytical and critical thinking skills alongside a strong aptitude for effective communication, enabling a rounded team engagement, to achieve significant and insightful contributions.

~/education/

Royal Holloway, University of London

Egham, UK

INFORMATION SECURITY MSc. DISTINCTION

Sep. 2021 - Sep. 2022

- Achieved distinction for my dissertation on cryptanalysis of post-quantum LWE based encryption schemes.

Royal Holloway, University of London

Egham, UK

MATHEMATICS BSc. HONS 1ST

Sep. 2018 - Jun. 2021

- Awarded the University of London Wynne-Roberts Prize in recognition of outstanding academic effort and achievement as the highest performing Mathematics student.

~/skills/

Programming	Rust, Python, Go, Ruby, Node.JS, LaTeX
Mathematical	Cryptography, Group/Field Theory, Number Theory, Information Theory, Probability/Combinatorics, Algorithm Design
Systems	AWS, GNU/Linux, Metasploit, Nmap, Bash, Burp
Web	Svelte, Express with Node.JS
Languages	English (fluent), Chinese (basic)

~/experience/

Supinie Solutions LTD

London, UK

PRINCIPAL FULL STACK DEVELOPER

Jun. 2022 - Present

- Understanding a problem brief, designing and architecting a full-stack solution built in AWS whilst working closely with a number of customers to deliver a tailored solution via an agile workflow.
- Implementing a secure user accounts system, including organisation management and access control.
- Implementing strong logical separation between components alongside rigorous access management controls to ensure best security practices are met.
- Implementing back end databases, as well as dependable integration with external APIs.
- Utilising agile workflow methods to ensure development time is properly spent, and ensuring all customer expectations are met, and exceeded.
- Utilising strong CI/CD principles to ensure early problem discovery, high productivity, and faster release cycles.

Amazon Web Services

Reading, UK

SYSTEM DEVELOPMENT ENGINEER

Sep. 2022 - Jun. 2023

- A key member of a small team that built AWS Service Catalog into 6 new regions, personally owning a number of internal component services.
- Worked to update the region build process to implement robust automation to cut down engineering hours by a factor of 10.
- Insisted on the highest standards when delivering, setting the standard for many implementations of automation.
- Hands on experience maintaining global services, ensuring the best and smoothest customer experience.
- Owned the full software lifecycle from development, through deployment, to supporting production via CI/CD.
- Ensured that the team met c-level deadlines that otherwise would not have been met; through driving and owning build processes.
- Created new training materials and led engineering development days and experience exchanges amongst 50 engineers as a subject matter expert.
- Created and developed a new collection of tools and scripts to aid engineering workflows within AWS and Service Catalog.

Cyber Software Development

London, UK

SOFTWARE DEV.

Jun. 2021 - Sep. 2021

- Developed a unique covert communication capability utilising decentralised peer-to-peer communications.
- Full stack web-dev.
- Worked with Node.JS back-end and Svelte front-end.

Immersive Labs

London, UK

SUMMER ONLINE LEARNING

Jun. 2020 - Aug. 2020

- Conducted self-driven learning through engagement with Immersive Labs.
- Focus on conducting attacks and offensive techniques.
- Topics covered included:

- Network enumeration
- Malware
- Service exploitation
- Credential cracking
- Privilege escalation
- IoT/Embedded systems

Cyber Summer School

London, UK

STUDENT

Jun. 2019 - Aug. 2019

- Covered a wide range of topics:
 - Network structure and protocols
 - SCADA (supervisory control and data acquisition) systems
 - Cryptography
 - Programming and scriptingallowing me to build a broad and robust understanding of many key areas of computer systems.
- Worked with TCP/IP and OSI models to conduct packet analysis and network monitoring utilising a wide range of tools giving me a strong understanding of networking protocols and how they work.
- Conducted analysis of SCADA systems using PLCs (programmable logic controllers) to write my own ladder logic program to automatically complete tasks in an ICS (industrial control system). This furthered my understanding and knowledge surrounding these systems as well as my fluency in using them.

International Supply Chain Company

Guangzhou, China

INTERN

Jun. 2016 - Jul. 2016

- Worked in various industrial settings and gained exposure to multiple manufacturing processes and quality control techniques in order to ensure compliance of a product to the client's product specifications.
- Due to the slight language barrier, it highlighted the importance of good and well-defined instruction and communication to clearly convey the client's needs.
- Worked on electronically enhanced hearing and protection devices, with both hardware and software related problems issues, such as poor isolation of key electronic parts causing feedback and software induced feedback.

~/extracurricular_activity/

Royal Hackaway

Royal Holloway, University of

London

BEST WEB-APP WINNER

Jan. 2022

- Won 'Best Web-App' and finished top 5 overall.
- Participated in a 26 hour national hackathon in a team of two.
- Developed a Svelte web-app with a Python machine learning back-end to predict the weight of an unborn child based on antinatal datapoints.

Guba Doce Pares (Eskrima-Kali-Arnis; a Filipino stick and dagger martial art)

London, UK

BLACK BELT/REGISTERED INSTRUCTOR

2014 - Present

- National men's open close quarters champion, single and double stick national champion, and single stick international champion.
- As a senior member, I spent many years teaching younger members of the club.
- As a registered instructor, I am looking to set up my own club in the near future.

RHUL Esports

Royal Holloway

TEAM CAPTAIN

2019 - 2022

- Led the Overwatch esports teams, overseeing both GameSoc events and national tournament entries due to my active contributions to the team as a top 100 player in Europe.
- Our team had multiple top 5 finishes in national leagues.

Old Elthamians

Bromley, UK

YOUNG LEADER

2014 - 2018

- Coached young members of the club, and scoring and umpiring all ages games.
- Awarded a Jack Petchey award for my contributions to the cricket club through the young leaders' programme.