

A confident and capable soon-to-be master's graduate with demonstrable success in both academic and extracurricular pursuits. Possessing a well-rounded skill-set including strong, proven communication skills, an ability to work, succeed, and lead within team-based environments, and a high degree of technical proficiency spanning a wide variety of technologies and disciplines. A cyber security specialist with supplementary experience in technical communication, software design and development, and interdisciplinary collaboration. Keen to transition towards applying current experience to real-world challenges while continuing to expand skill-set and knowledge of contemporary cyber threats and tools.

Core skills:

Bash and Linux

Risk analysis and ISO27001

Data security and GDPR

Programming (incl. Python, JS/TS, Java, C/C++)

Teamwork and Leadership

SDLC and DevSecOps

Digital Forensics

Communication skills (written and verbal)

Pentesting and Ethical Hacking

Mathematics

Education:

2022-Present: Queen's University Belfast, MSc Applied Cyber Security (Predicted Distinction)

NCSC certified degree. Continuing to develop a specialist understanding of cyber security begun during undergraduate study, with special interest in ethical hacking, cryptography, and the subject's multidisciplinary aspects. Selected modules undertaken and associated skills and knowledge consequently gained are:

- **Network Security:** Traffic monitoring and packet analysis (Wireshark, TCPdump); IDS/IPS (UFW, Snort); OSI model and network protocols; network security design principles and architectures (DMZs, access control, firewalls).
- **Software Assurance:** Detection and mitigation of software vulnerabilities (SQL injection, memory-based C/C++ vulnerabilities); ability to apply threat modelling and risk analysis (DREAD/STRIDE models); implementation of secure SDLCs.
- **Digital Forensics:** Digital forensics standards and best practices (ACPO guide, CYBOK model); Windows forensics (NTFS and FAT file systems, registry analysis); ability to summarise forensic findings with appropriate detail in technical reports.
- **Ethical Hacking and Penetration Testing:** Use of standard testing tools (BurpSuite, Metasploit, SQLmap, etc.); Web-based attacks (SOP, CSP, SQL injection); ability to demonstrate, model, represent, and suggest mitigations for threats identified via technical reports.
- **Applied Cryptography:** Strong understanding of fundamental cryptographic primitives and algorithms, including symmetric (AES, DES) and asymmetric (RSA, Diffie-Hellman, Elliptic Curve) cryptosystems, hashes, MACs, and their applications in IPSec, SSL and other systems.
- *(ongoing)* **Data Privacy and Law:** Multidisciplinary understanding of data privacy and the GDPR as well as equivalent legislation in USA, China, and India.

All completed modules were passed with distinction (grade: 70%+). For **Digital Forensics** and **Ethical Hacking**, grade received was highest in cohort.

2018-2022: University of St Andrews, BSc Mathematics and Computer Science (First Class)

Graduated with a first class degree and averaged above a first in each year of study completed; finished degree with an average Honours module grade of 18.35 out of a possible 20. Academic accolades received include medal awarded by the school of Physics and Astronomy for outstanding performance, and inclusion on Deans' List every year of study. Modules included:

- **Junior Honours group software development project:** Undertook a year-long project as a small group, designed and built a fully functional, federated social media site. Technologies used included Node.js, TypeScript, IBM Loopback 4, and MongoDB. Personal responsibilities included implementation of security controls, including the system's authentication/authorisation mechanisms and secure password storage. Gained experience in and knowledge of secure development practices in the context of Agile software development.

- **Senior Honours computer science project:** A year long individual project, focussing on automated musical transcription chiefly using Python. Gained further experience of good software development practices and demonstrated ability to apply self productively and work independently towards both long-term and short-term goals. Project was one of 6 in cohort to be included in student handbook as a model example for future students.

Extracurricular activities included contributing a number of articles to student music magazine Hearing Aid on a variety of topics; and being a member of the university's men's first volleyball team, including as captain in 2020/2021 which involved helping lead the volleyball club through the COVID pandemic and leading the men's team to Scottish Volleyball Plate finals.

2012-2018: Banchory Academy

Achieved A grades across all subjects taken throughout time at Banchory Academy. Advanced Higher: Mathematics, Mathematics of Mechanics, Chemistry, and Physics. Higher: Mathematics, Chemistry, Physics, French, and Computer Science. Fulfilled the role of Head Boy in final year of study.

Experience:

2022: Retail Salesperson - Cotswold Outdoor

Undertook seasonal (Christmas) work contract while studying for MSc. Honed established skills, including: consistent punctuality, strong inter-personal verbal communication skills, and capacity to work both independently and as a member of a larger team.

2021: Participant - St Andrews Global Challenges Programme

Worked in a small team to explore, research, and implement solutions to the question: *How can we achieve policies that are evidence-informed, in a timely and appropriate way to enable more effective responses to global crises?*

Outlined and implemented solutions targeted at reducing the effectiveness of misinformation through increased information literacy. Personal project responsibilities included:

- Overseeing design and development of technical aspects of proposed solutions.
- Development of open-source, extensible Chrome and Firefox compatible browser extensions providing users with information about elected representatives.
- Using Facebook and Twitter APIs to construct open-source, extensible, automated pages providing real-time information on votes taking place in government's legislative branch.
- Communication of technical aspects of project to panel of judges.

At project conclusion, the project was awarded the runner-up prize in overall competition of £1,000.

2020-2022: Volleyball Coach and Referee - University of St Andrews

Qualified Scottish Volleyball Association Grade 4 referee and Scottish Qualification Authority certified volleyball coach. Coached the St Andrews men's second team over a period of two academic years. Assisted with officiation of competitive matches played by the university's volleyball teams.

- As both referee and court-side coach, demonstrated strong leadership, ability to apply problem-solving skills, and ability to communicate assertively and calmly, even in fast paced environments.
- Alumnus of the 2020/2021 Saints Coaching Programme, a programme to help improve student-led coaching within sports clubs at the university.
- Honed communication skills as a coach by providing explanations and demonstrations of techniques and mechanics of volleyball and answering questions.
- Used leadership and organisational skills to organise and establish team structure.
- Refereed games for the university volleyball club and commissioned to referee games as an external referee for other volleyball clubs, demonstrating professionalism, leadership, and assertiveness.

2017-2018: Academic Tutor - Independent

Delivered lessons, remotely and in-person, on a variety of subjects including Mathematics, Physics, and Chemistry at National 5 and Higher standard (equivalent to GCSE/1st year A-level standard). All students tutored were able to meet or exceed their proposed goal for the subject being tutored. Responsibilities included:

- Planning and constructing lessons on topics students were unsure about.
- Organising and scheduling lessons, requiring good time-management and punctuality.
- Critical and empathetic communication skills were honed by discussing with students uncomfortable aspects of exams and assessments, such as exam stress, alternative pathways if exams were to be failed, etc.

REFERENCES AVAILABLE ON REQUEST.