

George Gilligan

Email: ggilligan12@gmail.com | Phone Number: +447468525643 | Site: gilly.tech | GitHub: github.com/ggilligan12

Security Engineer, Golang, C# and Python developer, Ballroom Dancer and Competitive Hacker.

EXPERIENCE

Thought Machine, Cloud Security Engineer

London, March 2022 - Present

- Deployed and maintained Falco (container runtime monitoring agent) for >2000 compute instances.
- Reviewed and improved container security contexts with aid of Open Policy Agent (OPA) conformity tests.
- Designed and implemented root user management policy for GCP estate.
- Wrote Go microservice to deploy instances to allow for AMI scanning by AWS Inspector.
- Wrote Go microservice to block a release pipeline if there is a serious vulnerability associated with it.
- Delivered presentations to colleagues on intrusion detection, binary exploitation and Kubernetes security contexts.
- Updated Terraform modules and recipes across entire company estate to ensure S3 bucket server side encryption.
- Triaged actual severity of vulnerabilities as reported by container vulnerability scanner.
- Organised hosting of 2 meetups of the OWASP London chapter.

Trading Hub, Software Engineer

London, June 2020 - March 2022

- Wrote interactive dashboards in .NET web app to delegate granular control of EC2's to non-infrastructure instance owners.
- Wrote Powershell running tool in .NET web app, allowing developers to save down clearly documented, parameterised scripts for intuitive use via GUI by less technical users.
- Helped design and develop a WORM compliant backup storage pipeline using C# and S3 Glacier.
- Maintained and supported custom C# automatic deployment and cloning pipelines for client EC2's.
- Assisted in company's transition towards a stack based entirely in CloudFormation.

Metaswitch Networks, Software Engineer (Intern)

Edinburgh/London, May 2019 - August 2019

- Added *Liquid Templating* to Ruby on Rails based diagnostics tool. Deleted thousands of lines of code with no functionality lost.

SKILLS

Programming Languages:

- **Proficient:** Go, Python
- **Intermediate:** Bash, C#, Powershell

Technologies & Libraries:

- **Proficient:** Kubernetes, Git, Terraform, VS Code, AWS (various services), GCP (various services), Falco, OPA
- **Intermediate:** Docker, SVN, Elastic, Vector, Helm

TEAM EVENTS

Deloitte CTF Qualifier 2019: Took 3rd place in the 2019 Deloitte CTF Qualifying round with the SIGINT 2nd team, beating 40 other university teams nationwide. Unfortunately could not qualify for the final as only one team per university was admitted.

Scottish Universities Cybersecurity Challenge 2018: Took part in competition run by BAE, National Grid & BT. My team won the CTF and came 2nd overall when factoring in the Social Engineering & Incident Response challenges.

Hack Harvard 2018: Worked with team to build "HexLedger", a hacker profiling app built on a multichain blockchain with a front end made with WixCode. We won "Most Useless Hack" out of over 200 teams. By far my teams proudest achievement.

Oxford Hack 2017: Created "IOTea", a tea brewing robot controlled via web app. We won Netcraft's "Best Hardware Hack", MLH's "Most Ergonomic Hack", Facebook's prize for "Aligning with their vision", and were overall competition finalists out of 100 teams.

INDIVIDUAL ACHIEVEMENTS & ACTIVITIES

- Implemented CNN from first principles to classify CIFAR100 dataset, achieved 64.6% accuracy across a test set of 10,000 images.
- Served as a representative of my cohort in my 3rd and 4th year of university. Entailed regular feedback gathering from classmates via surveys and reporting my findings to the Director of Teaching in weekly meetings, and holding them to account to deliver changes promised.
- Ballroom Dancer; have danced competitively on the university circuit and served as Compère for a small competition.
- Earned black belt in Taekwondo after 6 years of training and served briefly as assistant instructor.
- Ran a marathon in March 2017 in aid of Shelter Scotland. Also an avid cyclist.

EDUCATION

University of Edinburgh

2016 - 2020

Undergraduate: Computer Science & Mathematics BSc (2:1)

- **Topics Studied:** Algebra, Calculus, Statistics, Algorithms, Security, AI, ML, NLP, Quantum Informatics

Perse School

2009 - 2016

Secondary Level: A-Levels & IGCSEs

- **A-Levels:** Maths (A*), Physics (A), Economics (B); **IGCSEs:** 7A*'s 2A's 1B