

Experience

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|--|---|-----------------------------|
| Software Engineer | Raytheon (Harlow, UK) | Nov 2022 -- Present |
| <ul style="list-style-type: none">Proven C and Python software development and problem-solving skills to design and develop functionality and performance enhancements, bolstering Raytheon's complex radar system portfolio which serves $\frac{2}{3}$ of global air traffic.Expertise in communicating with customers to define issues and devise effective solutions.Thrived in a multi-disciplinary small team environment, engaging with team members to drive effective cross-functional collaboration and succeed in large customer contracts. | | |
| Full Stack Developer | ViewTest (Remote, Part-Time Contract) | Aug 2021 -- Jan 2022 |
| <ul style="list-style-type: none">Developed a monetised JavaScript Chrome extension that interfaces with Amazon.com to facilitate product market research for clients. The extension increased revenue for ViewTest by amassing 1000 users in the Chrome Web Store.Architected and developed a custom React survey platform that integrates with a third-party survey respondent marketplace to provide ViewTest clients with paid market insights and enhanced ViewTest's revenue model. | | |
| Frontend Developer | ShimmerCat (Remote, Part-Time Contract) | Dec 2020 -- Apr 2021 |
| <ul style="list-style-type: none">Integrated Shimmercat's compression engine into a JavaScript Chrome extension demonstrating image compression quality and generating downloadable compression statistics. This improved new partnership agreement conversion. | | |
| Full Stack Developer | Crowdbotics (Remote, Part-Time Contract) | Sep 2020 -- Dec 2020 |
| <ul style="list-style-type: none">Built a custom Django-backed social media scheduling platform with Amazon Web Services (AWS) S3 bucket storage integration. The platform improved client brand awareness and productivity.Developed and deployed a JavaScript Chrome extension that utilises LinkedIn and AWS S3 APIs to allow users to post brand-curated content directly to LinkedIn and improve their social media presence. | | |

Education

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- B.Sc. Computer Science (2:1)**, Durham University. **2019 -- 2022**

Relevant Courses: Algorithms and Data Structures, Networks and Systems, Artificial Intelligence

Projects

Alertbnb <https://alertbnb.com>

- Developed a full-stack authenticated **Django and React** web application that incorporates **Stripe** payments, **Celery** scheduled tasks and **Scrapy** to create a custom Airbnb alert suite with paying users.

Technical Blogging Website [Github Link](#)

- Developed lukezsmith.com, a blogging website using **Django** and **React**.
- Published technical articles on topics such as [AWS Lambda Layers](#) and building [Serverless file-sharing MacOS apps](#).

Co-operative Multi-agent Reinforcement Learning in Partially Observable Card Games [Github Link](#)

- Constructed a number of **deep reinforcement learning** solutions for team-based card games.
- Used **Python** and **PyTorch** to build agents comparable with state-of-the-art academic literature.

YawPy [Github Link](#)

- Built a 3D graphics engine with **Python**, **NumPy** and **Pandas**. The engine provides real-time model output based on IMU data and a complementary filter that fuses gyroscope, accelerometer and magnetometer readings.

Skills

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- Languages:** Python, JavaScript, HTML, CSS, C, Bash, Java, Swift, C#
 - Frameworks:** Django, Node.js, React, ASP.NET
 - Technologies:** MongoDB, SQL, AWS (S3, Lambda Functions, CloudFront and Route53), Git, PyTorch, Docker

Awards

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- Finalist of DurHack 2019 with WalkingBuddy, an **Android** app for scheduling group walks for enhanced city safety.
 - Zero-Knowledge University 2022 Cohort Scholarship.