London, UK
luke@lukezsmith.com
07470411333

Luke Zach Smith

linkedin.com/in/lukezsmith
github.com/lukezsmith

Education

- **B.Sc. Computer Science (2:1),** Durham University. **2019 -- 2022**
  - **Relevant Courses:** Advanced Computer Systems, Networks and Systems, Software Engineering, Artificial Intelligence

Experience

Full Stack Engineer **ViewTest** (Remote, Part-Time Contract) **Aug 2021 -- Jan 2022**

- 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 Engineer **ShimmerCat** (Remote, Part-Time Contract) **Dec 2020 -- Apr 2021**

- Integrated Shimmercat's compression engine into a **JavaScript** Chrome extension that demonstrates image compression quality and generates downloadable compression statistics. This improved new partnership agreement conversion.

Full Stack Engineer **Crowdbotics** (Remote, Part-Time Contract) **Sep 2020 -- Dec 2020**

- 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.

Software Engineer Intern **FDM** (London, UK) **Apr 2018 -- Oct 2018**

- Led the development of a new, digitised hiring system. Built a prototype hiring dashboard application in **ASP.NET**.
- Identified and met with key HR stakeholders to find bottlenecks in existing hiring systems.
- Designed a novel, efficient consultant-client matching system that reduces consultant placement waiting time.

Projects

STM32 FreeRTOS Command Line Interface Project Github Link

- Developed a **FreeRTOS** program written in **C** for **STM32** microcontrollers. The program runs a number of **GPIO** tasks and logs accelerometer data through a **UART** command line interface. Utilises **GoogleTest** for unit testing.

Aether High Altitude Balloon Project Github Link

- Contributed **C++** payload system code involving **RF transmission** through interrupts for a high-altitude balloon project.

TM4C Traffic System Project Github Link

- Built a GPIO traffic system for the **TM4C** microcontroller using **C**. I completed this project as part of UTAustinX's Embedded Systems course.

YawPy Github Link

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

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 with **Python** and **PyTorch**.

Skills

- **Languages**: C, C++, Python, Bash, JavaScript, HTML, CSS, Java, Swift, C#
- **Frameworks**: GoogleTest, Django, Node.js, React, ASP.NET
- **Technologies**: Make, CMake, FreeRTOS, GDB, UART, Git, MongoDB, SQL, AWS, PyTorch

Awards

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