

WORK EXPERIENCE

Software Developer III, Teamwork.com — June 2022 - Present

- Designed and implemented systems for asynchronous workflows (CronJobs) with Kubernetes, migrated existing system and reduced operating costs
- Responded to incidents and fixed production outages as they happened
- Investigated and deprecated faulty, rarely used, services and reduced yearly AWS bill by 1.5%
- Developed APIs with Go on a distributed system using Elasticsearch, Redis, MariaDB and AWS technologies
- Interviewed and mentored interns

Software Engineer, EkkoSense — May 2019 - June 2022

- Designed and implemented serverless architectures with AWS technologies
- Worked on the back-end PHP codebase as well as the JSON API
- Built front-end components with VueJS and managed application state with Vuex
- Wrote high-performance C++ code for proprietary hardware (servers and IoT devices) that performs calculations and processes messages

Team Lead - Group Project, NHS Connected — October 2019 - May 2020

Lead a team of 6 members to provide a solution to NHS Connected, as part of my university course.

- Designed a solution that allows many legacy systems to communicate with each other and wrote technical specifications
- Talked with clients and aggregated requirements for the project
- Organised and managed Scrum sprints (agile development)
- Implemented part of the code using GO for the CLI and ElectronJS with ReactJS for the user interface
- Worked with encryption, serialisation and deserialisation of messages from one format to another

EDUCATION

University of Nottingham — Computer Science BSc, 2018 - 2021

Degree Mark: 75% (1st class)

TECHNICAL EXPERIENCE

Cheapify.io - Go, TypeScript, AWS

Built an Infrastructure as a service platform for e-commerce

- Designed and implemented a distributed system to handle multi tenant data using microservices
- Developed an automated pipeline to generate API documentation from an OpenAPI spec
- Implemented high performance analytics using Elasticsearch
- Built CI/CD pipelines for deployment and provisioned AWS infrastructure

Render Engine - C++

Built a 3D render engine for my dissertation project.

- Developed a linear algebra library as well as classes and routines to render 3D scenes using ray-tracing
- Followed Test Driven Development practices and wrote tests before writing the code
- Used tools such as CMake, Google Test and CircleCI to build a code pipeline and automatically deploy newer versions of the code
- Made use of concurrency and careful memory management to accelerate computations

LANGUAGES AND TECHNOLOGIES

- Programming Languages: Go, TypeScript, JavaScript, C++
- Frameworks and Technologies: Microservices, Distributed Systems, AWS, Kubernetes, Docker, ReactJS, VueJS, Elasticsearch, Redis, AWS

AWARDS AND CERTIFICATIONS

- Certified Kubernetes Application Developer - CKAD (issued July 2023)
- AWS Certified Solutions Architect – Associate (issued November 2021)
- 4th at the Annual programming competition at the University of Nottingham (September 2019)
- Competed at NWERC (ICPC Regionals 2019) at Eindhoven