

Experience

Marshmallow Software Engineer II

09/20 → present

Software Engineer II, Frontend (React)

- Lead frontend on delivering an in house claims management system, saving £500k/year in third party costs and improving operations efficiency. Completed to plan in one year.
- Hired, onboarded and mentored frontend engineers for a second claims team in Budapest

Software Engineer Full-Stack (Spring Boot, React)

- Designed and implemented an automated claims fraud system, consuming data from multiple microservices.
- Worked on various fraud and pricing initiatives including adding pricing factors and controlling sensitive data.

Junior Software Engineer Full-Stack (Spring Boot, React)

- Worked on third party integrations, including implementing authentication and communicating with third party engineers to test and make changes to APIs.
- Added service to call SageMaker models, substantially improving auto fraud block performance and improving work prioritisation for fraud agents.
- Created a document OCR check with amazon Textract to flag to customers in real time when documents do not have the required information.

Graduate Software Engineer API Development (Spring Boot)

- Developed fraud system noted as best in industry during series B funding round leading to unicorn valuation.
- Added integrations with third party fraud databases to create more intelligent fraud checks allowing new business volumes to double.
- Maintained fraud microservices infrastructure (AWS, Terraform)

Amazon Software Development Engineer Intern

07/19 → 09/19

- Built a reporting system for monitoring warehouse robot performance in python. This system was rolled out worldwide and was actively used at Amazon fulfilment centres in North America and Europe.

Nissan Software Engineer Placement

06/18 → 06/19

- Full-stack developer on a system for managing shipping large numbers of cars throughout Europe forecast to save £6m/year. Took over development on an app in use at multiple car storage compounds in Spain that had not been maintained in over a year to deliver critical updates.

BBC Programming Teacher

02/18 → 05/18

- Taught year 8 students to program using the BBC micro:bit computer as part of BBC R&D's CLIMB Initiative. Demonstrated lessons to creators of the micro:bit and the Director-General of the BBC in Manchester.

Projects

Geologic Time Scale Created interactive charts using D3.js, displayed locations of geological markers on a globe using GeoJSON. Rendered maps showing continental drift (python, geopandas, matplotlib) with data from the PALEOMAP project. Optimised page loading time by adapting map image sizes to display resolution. React web app, state management with Redux-Toolkit. Referenced by the *Geologic Timescale Foundation* website. liamp.uk/timescale ↗

MiniKeys Created a small javascript library for playing piano using the web audio api. Sounds for midi notes are interpolated from any number of music samples. Built an example website that plays the piano with only 12 samples using a computer keyboard. liamp.uk/minikeys ↗

Chess Experimenting with a better UI for playing offline chess on a phone, where pieces rotate so the phone can be placed between players like a normal chessboard. liamp.uk/chess ↗

Education

Newcastle University Computer Science BSc (Hons) - First class

2016 → 2020

Skills

React, Typescript, Redux-Toolkit, styled-components, CSS, D3.js, Java, Sprint Boot, Python, Terraform, CI/CD, Figma