

Employment

JavaScript Developer @ Innovate UK, UK Research and Innovation August 2022—Current

- Maintains support for GOV.UK Design System compliant ReactJS website
- Reduced development build times 10-fold by migrating from Webpack to esbuild bundler
- Led migration from SOAP/Salesforce SOQL to GraphQL to reduce data load times

Teaching Assistant @ Royal Holloway September 2021—December 2021

- Broke down complicated computer science topics for a first year undergraduate audience
- Taught the fundamentals of Python and Java

Voluntary Work

Code Club @ Gravesend, Kent Libraries August 2017—May 2019

- Taught programming to 9 to 12 year old children with Python and MIT Scratch
- Collaborated with librarian and other volunteers to introduce new tasks and activities for events

VP, Royal Holloway, Computing Society

- Organised Hackaway v5, a multi-university hackathon to promote creating new innovative programming projects in a limited timespan
- Created livestream character graphics overlay in React and NodeCG to provide live music and messaging for hackathon livestream

Education

Royal Holloway, University of London First Class BSc Computer Science 2019 to June 2022

Final Year Project

- Created NextJS application for viewing vectorised map data in both a mobile/tablet/desktop form factor
- TDD unit testing with Chai
- Leveraged Apollo and GraphQL for caching client/server API access
- Stored map data in SQLite with Prisma ORM for portability to other database backends

Key Skills

- JavaScript/TypeScript with ReactJS, Vue; Responsive websites with SASS/SCSS, Tailwind CSS
- C# & .NET experience with Microsoft Office Addons (VSTO)
- Experience maintaining both Windows Server and Linux VMs, with Docker, nginx, Apache Guacamole
- Experience working with Atlassian Bitbucket, Jira Confluence, Bamboo and GitHub with GitHub Actions

Projects

DECTalk Text to Speech

Ported 80s text-to-speech software to the web with Emscripten and providing general dev-ops to bring the iconic TTS to the blind, and the community

- Hosting Visual Studio 6 automatic builds on a virtualised Windows Server 2022 instance
- Ported 30-year-old C code to work with latest Visual Studio 2022 and EMCC Compiler

Full Stack Chat Bot Application Market

Created a full stack SSR website in React/Express for listing available chat bots for Discord

- Used Redux with Redux Thunk for SSR and client-side hydration

Royal Hackaway Website

Helped develop re-imagined hackathon website by following UI mock-ups created by president

- Developed a website with Gatsby and ReactJS
- Set-up CI/CD with Cloudflare Pages to automatically push latest changes to webpage
- Refactored legacy pages and re-implemented them from Jekyll liquid to React components, to maintain compatibility with old links

Microsoft Office + Discord Activity Integration

Created a novel open source tool for displaying Microsoft Office status within the Discord chat application

- Developed and self-published a Microsoft Office extension with the Visual Studio Tools for Office suite, with .NET and C#
- Created distributable installers with the Wix installation toolset