

Henry Russell

Advanced Software Engineer

Work History

Advanced Software Engineer 2023 – Present

Zühlke, London

Co-op Funeralcare (Digital Products Team)

Vue, TypeScript, Python, Django, AWS, Contentful, Adobe Target

Built and maintained Vue microfrontends and Jinja/Contentful templates to build key customer journeys (Direct Cremation, funeral home finder). Delivered a new finder application during a code-freeze incident, created a shared component library with support for web components, and implemented Adobe Target A/B tests (client-side scripting, variant logic, KPI monitoring). Contributed to Python/Django services, Lambda-backed integrations, and active monitoring. Facilitated agile ceremonies, tech-debt reviews, and knowledge-sharing sessions, in an award-winning team we reached a record 15.85% market share.

PostFinance – AWS Bedrock Chatbot UI

Vue, TypeScript, AWS Bedrock

Built a lightweight Vue front end integrating with AWS Bedrock for a mortgage chatbot in a 10-day delivery window, focusing on clean architecture and easy client extensibility.

Professional Software Engineer 2022 – 2023

Zühlke, London

Handelsbanken (Mortgage Application Platform)

React, TypeScript, React Testing Library, Java, TDD, SAFE

Developed regulated mortgage application journeys under strict constraints (no external libraries). Implemented custom routing, state management, validation, and a debounced autosave system using React hooks and shared stores. Practised TDD and pair programming; collaborated closely with QA in a shift-left workflow. Integrated with internal banking systems (document generation, data services) and delivered a successful MVP as part of a blended team.

Computer Science Teacher 2022 – 2024

Academic Tutors Surrey

One-to-one A-level Computer Science tuition, including lesson planning, explaining core topics and providing coursework feedback.

Software Engineer Intern Summer 2021

Royal Holloway

Lead developer for a student module-selection web platform integrating with internal university systems and used by students.

Computer Science Teaching Assistant 2020 – 2021

Supported first-year programming labs and assisted with marking coursework.

Student Ambassador 2019 – 2020

Represented the university at open days, campus tours and events within the Computer Science department.

Maths and English Tutor 2017 – 2019

Kumon, Frimley

Tutored students up to A-level, helping them progress through the Kumon programme and build confidence in core subjects.

Education

MSc Software Systems Engineering

University College London (UCL) · 2021 – 2022 · Distinction

Research collaboration with Intel and Microsoft: developed a Visual Studio plugin for gesture-based, touchless interaction with the IDE.

BSc Computer Science (Software Engineering)

Royal Holloway, University of London · 2018 – 2021 · First-Class Honours (avg 80%)

- Computer Science Prize for outstanding final-year project (2021).
- Best Second-Year Software Engineering Group Project (2020).
- Top academic performer (2019).

A Levels & GCSEs

- A Levels: Computer Science (A), EPQ (A), Psychology (A), Maths (B).
- 14 GCSEs A*–B, including A in Electronics and A grades in Computing, Maths, English and Sciences.

Skills and Projects

Front-end web:

- React, Vue, TypeScript, component-driven architecture and modern UI patterns.
- Actress portfolio website: SEO-optimised portfolio with CI/CD deployment (wendyannedaloz.com).
- Creator website: interactive mini-games and an old-web themed design (babybelle.neocities.org).
- Electron-based design-thinking tool built for IBM ideation workshops.
- Interactive HTML5 canvas and creative web experiments.

Full-stack web:

- Kanji-learning automation tools: built an unofficial API and a system that adds AI-generated mnemonic hints into a language-learning platform.
- Microservices-based multiplayer and real-time chess tournament application.
- React dashboards backed by Python API services.
- Royal Holloway module-selection system used internally by students.

Java:

- JavaFX chess engine with SQLite persistence layer.
- Autonomous Lego Mindstorms robot for search-and-retrieve tasks.
- Experience applying MVC, Observer and Factory patterns in test-driven builds.

Cloud, Tooling & Automation

- AWS Solutions Architect Associate (2024).
- Deploying and integrating applications across AWS and Azure.
- Linux-based development workflows and automation.
- Docker for lightweight multi-service development environments.
- ChatGPT Automation Pro: Firefox extension that automates ChatGPT workflows (addons.mozilla.org/en-US/firefox/addon/chatgpt-automation-pro).
- UserScript Compiler: converts userscripts into installable extensions. (<https://hrussellzfac023.github.io/UserScript-Compiler/>)

Hobbies and Interests

Web development, Japanese language study, chess and strategy games, psychology and human behaviour, photography, AI-augmented development, and lifelong learning.