# Work History

# Advanced Software Engineer

**Henry Russell**

# BSc Computer Science (Software Engineering)

**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

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| **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](http://wendyannedaloz.com/)). * Creator website: interactive mini-games and an old‑web themed design ([babybelle.neocities.org](http://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](http://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.