

# Henry Russell

## MSc Software Systems Engineering (UCL)

### Education

MSc Software Systems Engineering

*UCL (2021-2022)*

BSc Computer Science (Software Engineering)

*First Class Honors, Royal Holloway University of London (2018-2021), grade average of 80%.*

Academic awards:

*Computer Science Prize for outstanding final year project (2021),*

*Best Second Year Software Engineering Group Project (2020)*

*Outstanding academic performance - 1 of 17 students who scored over 80% (2019)*

A Levels & GCSE

*Computer Science (A), EPQ (A), Psychology (A), Maths (B).*

*14 GCSE's A\*-B. A\* in Electronics. A's in Computing, Math's, English literature, language, and sciences.*

### Work History

Software Engineer Internship Paid Internal Placement | Royal Holloway | 2021 Summer

*Lead developer, student module selection web application interfacing with college systems.*

Computer Science Teaching Assistant | Royal Holloway | 2020– 2021

*Remote and in person support during lab sessions for first year modules and marking.*

Student Ambassador | Royal Holloway | 2019– 2020

*Open days, Campus Tours, Carpark management, and roles in the computer science department.*

Math and English Tutor | Kumon – Frimley, England | 2017– 2019

*Tutored up to A level students in Math's and English, helped them to make corrections, documented progression.*

IT And Marketing | VocaLink (Mastercard) – Hertfordshire, England | 03/2016

*Week Placement, Shadowed meetings, Created Infographic for social media dept., Installed plasma screens for IT support dept*

### Project Experience

Full-stack web:

- Actress portfolio with continuous deployment (wendyannedaloz.com). SEO Ranked on the first page google search.
- Multiplayer, concurrent game environment based around microservices and the cloud.
- React asset management dashboard with python API
- Module Selection system for students at royal Holloway.

Front-end web:

- Custom portfolio website for an actress client.
- Carpark management system in React.
- HTML5 canvas games including Tower defence, chess, TicTacToe, and Rock Paper Scissors.

Java:

- JavaFX chess application with SQL-lite database for storing game history.
- Lego robot to scan an area for "landmines", collect them and return them to a checkpoint.
- Test driven graphical and command line calculator using observer, factory, visitor and MVC design patterns.

Unix and deployment:

- VPS hosting with AWS, Azure and Google compute.
- Linux (desktop and bash)
- Docker and Docker compose for the deployment of an asset management system on Heroku. Environmental variables used for ports and admin password.
- Microservices and container orchestration.

**Additional:**

- Google FooBar challenge completed up to level 3 (2020).
- LinkedIn JavaScript Assessment (2020).
- Extracurricular club "programming polyglots", each week a new programming language was taught. (2017 - 2018).
- Excellent understanding of hardware and software. Skilled in Microsoft office; PowerPoint and Excel with ECDL cert.
- Public speaking in mock student elections and mock United Nations (pre 2018).
- *Volunteering:* Leader Japanese club and the Chess club (2017 - 2018). Student ambassador; Air cadet and Bronze DofE (pre 2018).

*Hobbies/interests: CAD/CAM, Photography, Web Development, Podcasts, Psychology, Chess and strategic computer games, Japan.*