Freddie Butterfield

freddie.butterfield1@gmail.com | 074012 31995 | Website | LinkedIn | github.com/wokaine

Education

University of Sheffield, MEng Software Engineering (Computer Science) with a Year in Industry — Sept 2021 – Jun 2026

- Notable Modules (& Grade): **Systems Design and Security** (62), **Data Driven Computing** (61), **Computer Security And Forensics** (77), **Software Testing and Analysis** (71).

Bradford Grammar School — Sept 2013 - Jun 2021

- **A-Levels**: Computer Science, Maths, Physics, Extended Project Qualification (A*AAA)
- 10 GCSEs achieved 9-6 including Computer Science, Mathematics, Physics and English

Experience

QA Engineer, Hewlett Packard Enterprise – Bristol, UK — July 2024 – Present

- Developed a full system test in **Python** capable of covering three separate test cases that perturb the compute nodes of a storage array controller during data transfer from an old array to a new one.
- Deployed AWX using **Kubernetes** to simplify the process of configuring and maintaining Linux test infrastructure previously done using manual **Ansible** playbook execution.
- Helped to introduce linting to the team in order to ensure the production of clean and maintainable code.
- Organised numerous charity events including dodgeball, sports day, and a formal gala event.
- Worked simultaneously with multiple development teams, and was recognised for this with an award at the end of the internship.

Undergraduate Demonstrator, University of Sheffield, UK — Sep 2023 - Dec 2023

- Aided students in their weekly **Java** exercises, with the exercises getting increasingly difficult.
- Motivated by a desire to demonstrate and improve my teaching skills.

Projects

Dissertation Project

- Developed a "lyrics-based" music recommendation application in **Python**, achieving a grade of 68%.
- Compared the performance of Latent Dirichlet Allocation, Word2Vec, and GloVe in their ability to produce accurate vectors that represent the words in a song.
- Conducted a user survey to assess the performance of the application, with 71% saying they would use it again.

“Ball Oracle" — Link

- A collection of football-themed machine learning projects developed in Python with pandas, scikit-learn, and Textual.
- Includes a K-Means clustering algorithm to group players based on play style in order to find underrated players, among other future projects.

Skills

Programming Languages: Python, Java, Ruby

Industry Tools & Standards: Agile, Jira, Trello, Git (GitHub, GitLab)

Scripting & Automation: Ansible (& Tower), Bash

Infrastructure & Observability: Linux, Kubernetes, Grafana

Databases: SQL (SQLite, MySQL, PostgreSQL)