Gemma Tipper

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Experience

Citrix Systems - *Software Engineering Intern*   Jul. 2021–Jun. 2022 | Remote, UK

· Worked in the DevOps Core Tools team, improving **developer experience** across core systems including Jira, Kubernetes, MS Azure and Artifactory.
· Developed the **cloud migration strategy** for on-premise Kubernetes to MS Azure over a full PI cycle as part of the Scaled Agile Framework (SAFe) for all engineering teams, working alone with minimal guidance.
· Authored several **automated solutions** for the Core Tools team in **Python** and **Bash**, including data logging for Kubernetes with Grafana visualisation, with attention to the details of the team's complex technology stack.

Sure (Isle of Man) Ltd - *Automation and AI Report*   Aug. 2019 | Isle of Man

· Individually researched, wrote and presented a report on **potential applications of AI** in the company's contact centre, consulting with and observing the contact team at work.
· Created opportunities to improve efficiency by using AI techniques to automate common business processes.

Education

University of Bath - *BSc in Computer Science*   Sept. 2019–Jul. 2023 | Bath, UK

· Degree classification: **First Class with honours**
· Subjects covered include advanced algorithms and complexity, functional programming and parallel programming.
· Dissertation topic: **Implementation and extension of the Functional Machine Calculus to support concurrency**
· Dissertation included designing and writing an **interpreter** in Rust to demonstrate the extension to concurrency

Projects

Wirebrush - *Personal website*   Jun. 2023

· Built a website from scratch using **Rust** in order to host online projects and a professional bio.
· Started with a basic web server backend, then implemented HTML templates with the **Maud** crate for the frontend.
· Created a CI pipeline using **GitHub Actions** to ensure production code status can be monitored accurately at all times.

MEOWDY - *One of three group members*   Mar. 2022 | Bath, UK

· Participated in a 24-hour **hackathon**, the University of Bath Wackathon 2022.
· Created a concept for an RPG game "MEOWDY" by learning and using the Rust game engine **Bevy**.
· Presented to industry professionals, showcasing strong communication and teamwork skills and winning the prize for "Most Entertaining" project.

Technical Skills

Programming	Rust, Python, Haskell, Java, Git, Bash, C, HTML, JavaScript, TypeScript, SQL, Arduino C
Software	RustRover, IntelliJ IDEA, PyCharm, CLion, LaTeX, Typst, GitHub, MS Office & Teams, Notion, Discord, Slack, Trello

Awards and Achievements

2020	**Chair** of the Women in Technology society at the University of Bath, using organisation and planning skills to chair a 30 person society
2012-2019	24 total Founder's Day prizes, including 7 prizes in Maths, awarded for **academic excellence**
2019	Sure Ltd. **Women in STEM** Bursary, awarded for academic excellence and passion for Computer Science
2018	Mansat scholarship to attend **United Space School** in Houston, TX, awarded for winning an essay competition on the subject of the future of space exploration