Frey Lyons
1st BSc (Hons)
Economics with Data Science - University of Kent

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Data Engineer and DevOps practitioner with hands-on experience building automated pipelines, containerized deployments, and production-ready infrastructure. Skilled in Python, SQL, Docker, and Linux systems administration, with a 1st-class degree in Economics with Data Science and a CMI L4 Management qualification

Work Experience

April-Present 2025 Ecommerce Executive, Motohaus Powersports

- Act as the sole data and infrastructure engineer in the company, consolidating fragmented data management into a unified, automated system and driving DevOps best practices from the ground up.
- Provision and administer a dedicated Debian 12 bare-metal server, configuring networking, DNS, VPNs, and Docker-based services to support production workloads in a secure, scalable manner.
- Design and operate a multi-layer ETL stack on PostgreSQL, implementing automated validation, cleaning, and transformation pipelines to ensure data integrity and reliable downstream operations.
- Develop reusable Python components, packaged into an internal GitHub library and deployed across ETL services, standardising integrations and reducing duplication.
- Automate deployment and operations using Docker Compose with modular YAML configurations, supported by just-files to streamline complex orchestration commands.
- Implement automated container testing workflows with pytest, including both unit and integration tests, to ensure reliability of services before deployment.
- Maintain observability through container-level logging and cron-based job monitoring, with plans to extend into structured monitoring and alerting solutions.
- Collaborate directly with non-technical stakeholders and end users to gather requirements, validate automation outputs, and ensure solutions meet operational needs.
- Reduce manual data handling tasks by over 90%, cutting a weekly two-hour process into a fully automated daily pipeline, improving system efficiency and timeliness.
- Apply DevOps principles including containerisation, CI/CD practices, and configuration automation, with planned next steps in GitHub Actions, Ansible provisioning, and secrets management (e.g., HashiCorp Vault)

May-August 2023 Production Assistant, Thunderbird Skin

- Handled diverse roles at a skincare manufacturer, contributing to team problem-solving.

May-August 2021 Independent House Renovation

- Took initiative to renovate my dad's house, liaising with estate agents, planning and coordinating a schedule of work and delegating where necessary. Resulted in a rise of the property's valuation from £180,000 to £210,000.

Technical Skills

- **Python** – Functional/Lambda programming, pytests, packaging, Pandas (very proficient), NumPy, SQLalchemy, matplotlib/seaborn.
- **JavaScript/NodeJS** – Web scraping (puppeteer).
- **Git/GitHub** – project workflow/version control. Build source.
- **Debian, Arch, NixOS** – System administration, both locally and on remote dedicated servers. Development, production, and lab environments. Virtual Machines and containers.
- **Docker** – Networking (bridges, ipvlan, etc.) Compose specs, developer environments (pycharm), GitHub CI.
- **Postgresql** – Querying and data transformation (Also with SQL server), DDL, views, administration, pgadmin 4.
- **Networking** – DNS, NAT, VPNs (Tailscale, Wireguard), OAuth2
- **Windows 10/11** – Basic system administration, office tooling, programming (linux preferred).

Education

2021 – 2024   1st BSc (Hons), Economics with Data Science, University of Kent

- **Year 3:** Economics Dissertation, Financial Economics, Mathematical Economics, Game Theory for Economics and Business, Econometrics I: Cross-Sectional and Panel Data, Econometrics II: Time-Series, Behavioural Economics.
- **Year 2:** Microeconomics, Macroeconomics, Introduction to Econometrics, Introduction to Time-Series Econometrics, Computation and Modelling for Economists, Big Data and Machine Learning.
- **Year 1:** Principles of Economics, Mathematics for Economists, Statistics for Economics, Introduction to Object-Oriented Programming, Programming for Artificial Intelligence, Data Analysis for Economists, Strategy and Games.
- **Economics Dissertation:** Panel data research project into the negative externalities of Airbnb on the local Labour Market, undertaken at the ZIP code level with data from the USA. Made great application of Exploratory Data Analysis, Extract Tranform Load processing and regression analysis using Python, R and SQLite.

2020 – 2021   BSc (Hons) Economics with a Foundation Year, University of Plymouth

- **Foundation Year (First):** An Introduction to Economics, Introduction to Academic Writing, Introduction to Business and Accounting, Research Skills, Supervised Research Project.

2016 – 2020   Secondary Education – Independent Candidate, Norwich School

- A Levels: Mathematics, History, Psychology
- IGCSEs: A*- B, including English & Maths, 7 Total

Professional Development

2021 - 2024 University of London Officers' Training Corps

- Completed part-time officer training with the Royal Military Academy Sandhurst University Officer Training Corps, earning a Chartered Management Institute leadership and management qualification.
- Developed leadership, teamwork, and decision-making skills under pressure by leading a section of 8 cadets in complex exercises, coordinating logistics, and ensuring safety in dynamic environments.
- Gained experience in planning, communication, and responsibility for team performance — skills I continue to apply in technical and collaborative work.

Personal Hobbies and Interests

- Developing personal services on a Hetzner dedicated server with NixOS, including self-hosted accounting, file hosting, and financial planning tools, with future plans to integrate the Monzo API.
- Active in LGBTQ+ community events including Pride and queer cultural gatherings, reflecting a commitment to inclusivity and diversity.
- Passionate about music, especially electronic genres such as techno and hardstyle, and enjoy attending live events and festivals.
- For wellbeing, I enjoy long walks and pole fitness, and I'm keen to explore historical martial arts (HEMA).