

TECHNICAL SKILLS

Languages: Python, C, Go, JavaScript (ES6+), Terraform, HTML/CSS, SQL, Angular, Bash/Shell, VBA

Frameworks: Agile, React, React-Native, Angular, Node.js, Pytorch, SpaCy, Scikit-learn, Flask

Developer Tools: Git, Docker, AWS, Jenkins, Jira, Bitbucket, Linux/Unix (Ubuntu, Amazon Linux)

CAD/Analytics Tools: PowerBI, Adobe (Photoshop, Illustrator, Indesign), Autodesk (AutoCAD, Revit, 3DS Max), Unreal Engine

Certifications: AWS Cloud Practitioner, Neo4j Certified Professional, The Complete 2023 Web Developer Bootcamp

RELEVANT EXPERIENCE

Software Engineer

Manchester, UK

ETAS (Bosch Automotive Service Solutions)

Sep. 2024 – Present

- Managed Linux-based servers (Amazon Linux, Ubuntu) in production and staging environments, automating system setup, backups, and scalable deployments using Bash scripts and cron.
- Built and maintained CI/CD pipelines using Jenkins on Linux systems, incorporating system service management and log-based diagnostics for reliable deployment automation.
- Developed a Java-based logging application to extract system metrics from a proprietary automotive tool, transforming raw logs into structured HTML reports emailed to **25+ stakeholders**. Enabled system health monitoring using automated jobs.
- Designed **ML-based diagnostic prediction tools** using sequential pattern mining, improving vehicle next-likely fault forecasting accuracy to **60%** and informing predictive maintenance strategies.
- Architected and delivered a production-ready natural language interface for Neo4j, using transformer-based intent classification and fine-tuned LoRA models — enabling non-technical users to query graph data directly with **>90% success**.
- Redesigned a high-cost analytics system architecture by replacing AWS OpenSearch Serverless and OSIS with a self-managed EC2-based OpenSearch cluster, integrating custom ingester nodes and an updated parser. Reduced monthly costs from **~\$5500 to \$675 per month** (88% savings) while maintaining full scalability and functionality.
- Reduced data pipeline latency by over **70%** by replacing legacy architecture with scalable Python-based XML-to-JSON AWS Lambda solution processing **130M+ records daily**.
- Reverse-engineered and documented a legacy Azure-based analytics platform to ARC42 standard—unifying knowledge for 10+ cross-functional stakeholders and enabling maintainability, onboarding, and modular feature expansion.
- Integrated REST APIs with Angular and handled authentication using JWT for secure, dynamic content rendering.

Graduate Data Analyst

Wolverhampton, UK

KTC (Edibles) Ltd — Supplier & Manufacturer for Food & Oil

Jun. 2023 – Oct. 2023

- Led the automation of SQL-based business insights, **eliminating 16 hours** of weekly manual effort and streamlining data delivery. Enabled real-time reporting for **80+ employees**.
- Redesigned Sales Dashboard UI and VBA-driven inputs. Optimised data organisation through data modeling and reduced anomalies. Post-deployment survey showed **93% satisfaction** improvement in usability and reporting efficiency.

Data Science Intern

Remote, UK

Datern – Data Consultancy

Jun. 2023 – Jul. 2023

- Built ML-powered data workflows with SQL, Python, and Power BI — boosting forecasting accuracy and improving web-scraping throughput by 40%, based on observed runtime improvements during testing.

EDUCATION

Academic Qualifications

Master of Science, Applied Data Science — University of Buckingham

In Progress.

Master of Science, Computer Science — University of Bath

Graduated with Distinction

Awarded the Global Leaders Scholarship for academic excellence and outstanding leadership.

Honours Bachelor of Science — University of Bath

Graduated with 2:1

Professional Qualifications

Level 7 Certificate, Digital and Technology Solutions Specialist

In Progress.

Level 3 Diploma, Networking and Cybersecurity

Awarded by Gateway Qualifications

Early-stage Carbon Observer (ECO) | *Python (Scikit-learn, spaCy, NLTK), Flask, Docker, React.js, Netlify, HuggingFace Spaces*

- Built and deployed a production-grade ML tool to predict embodied carbon from architectural design descriptions using an NLP ⇒ Histogram-based Gradient Boosting (HGB) pipeline. Backend deployed on Hugging Face Spaces; frontend live via Netlify.
- Achieved a **System Usability Scale (SUS)** score of **84.75** in a user study tested by **43 AEC professionals and students**, with average ratings of **4.89/5** for usability and integration.
- Achieved **100% precision in ranking** carbon impact in structured test cases via transformer-based entity recognition and semantic analysis (spaCy, Hugging Face, NLTK).
- Identified real-world use cases such as BIM-integrated carbon reporting, speech-based sustainability feedback in design meetings, and curriculum embedding for sustainability education.

Bloom: Gamified Plant Learning Application | *JavaScript, React, React-Native*

- Led the design and delivery of **Bloom**, a cross-platform mobile app that gamifies plant care education through interactive learning and habit-forming mechanics.
- Deployed to **12+ physical iOS/Android devices** via Expo for real-world testing, enabling iterative UX improvements and device-specific optimisations.
- Improved user experience through weekly feedback loops, resulting in an **80% increase in satisfaction scores** and measurable gains in user engagement.
- Implemented gamification features such as care reminders, achievement tracking, and adaptive quizzes, achieving a **60% next-day user retention rate**.