

# Orlando Alexander

✉ orlando@orlandoalexander.uk ☎ +44 7486372351 📁 Project Portfolio 🌐 LinkedIn 🐙 GitHub

## EDUCATION

### BSc Data Science, University of Bristol (2024 - 2027)

- Achieved First-Class (Year 1) with 87% in Algorithms & Programming and 83% in Coding & Data Analysis.
- Wrote renewable energy research paper (85%) using Python to analyse 28-year global dataset, revealing inverse GDP-fossil fuel correlation and eight-fold renewable energy growth in high-income countries (2000-2015).
- Proficient in Python, JavaScript, React, SQL, R, C, C++, TensorFlow, Pandas, NumPy, Flask, AWS, GCP, and GitHub.

### A-Levels, Berkhamsted Sixth Form (2020 - 2022)

- A\*, A\*, A\*, A in Physics, Computer Science, Mathematics, and Further Mathematics.
- A\* (100%) in EPQ: Designed a flow-optimised hydroelectric energy generator to maximise power output.
- Head Boy: Founded Academic Gala; delivered talks to 1,000+ audience members; campaigned on food waste.

### Data Science Bootcamp, Le Wagon (Oct - Dec 2022)

- Intensive 10-week course on Machine Learning, Deep Learning, Data Engineering, and Data Analysis.
- Capstone Project: Trained 9 CNN classifiers on 40,000 fashion images with TensorFlow (70–95% accuracy); integrated with ASOS API and KNN similarity model via Scikit-Learn to recommend personalised outfits.

## PROFESSIONAL EXPERIENCE

### Head of Data Science & Software Engineering, 180 Degrees Consulting, Bristol (Sep 2024 - Present)

- Lead 36 consultants delivering pro-bono projects for 7+ social impact clients; achieved 100% satisfaction rates.
- Scaled Data Science division 112% in six months (17 to 36 consultants), attracting over 450 applicants in 2025.
- Secured Le Wagon (#1 global tech bootcamp) partnership to train consultants in Data Science, Software, and AI.
  - Data Pipeline for Disease Analysis, EcoSwell (Jun - Sep 2025)**
    - Implemented end-to-end Python data pipeline with Pandas, NumPy, and Selenium consolidating 66,000 entries from 5 years of weather, dengue, and expenditure data, replacing weeks of manual downloading.
    - Used Monte Carlo method to forecast dengue outbreaks in Peru, enabling data-driven public health decisions.
  - Resource Management Platform, everyFAMILY (Feb - Apr 2025)**
    - Deployed React web app with Flask backend using Docker on GCP to streamline digital resource management.
    - Reduced staff onboarding time by 30%; achieved 100% client satisfaction rating for exceeding expectations.
  - Food Aid Analytics Dashboard, Cirencester Foodbank (Sep - Dec 2024)**
    - Developed geospatial analytics dashboard with Streamlit featuring location clustering to visualise 5,000+ food aid records across 100 data fields using Python, Pandas, and Matplotlib.
    - Delivered 3 years of insights on regional demand and seasonal trends to enable targeted aid allocation.

### Full-Stack Software Engineer, Educatch, London (May 2024 - Present)

- Designed and deployed production-grade React platform with MySQL backend, automating scheduling, invoicing, and attendance analytics for 50+ students.
- Reduced administrative workload by 10 hours/week; became company's most-used tool, supporting expansion.

### Junior Software Engineer, VISENSE, Berlin (Feb 2023 - Feb 2024)

- Built visual ML studio with React frontend to create video and PLC analysis workflows in under 5 minutes.
- Deployed to Fortune Global 500 clients BMW and ABB for real-time incident detection on production lines.

### Junior AI Engineer, Connect AI (Jan 2023 - Jan 2024)

- Developed GPT-4 LLM-powered customer support assistant with React frontend for startups including Digital Republic, handling 5,000 messages/month with 24/7 multilingual support.
- Implemented RAG (Retrieval-Augmented Generation) workflows with real-time feedback loops, reducing support ticket volume by 20% and improving resolution time by 95%.

### Renewable Energy Intern, EcoSwell, Peru (Aug - Sep 2022)

- Developed integrated monitoring system with Python on Raspberry Pi, capturing 10,000+ data points weekly across 8 key data types.
- Designed offline logging system for automated, reliable reporting on UN SDG goals in remote conditions.

### Computer Vision Engineer Intern, Inovo Robotics, Guildford (Aug 2021)

- Designed computer vision system for automated pastry decoration, 90% more efficient than manual methods.
- Implemented advanced algorithms including Canny edge detection, Hough transformations, and clustering for path optimisation using OpenCV and mlrose.

## INTERESTS

**Programming Tutor** — Tutored 300+ students in Python, Web Development and ML at PMT, codetoday and Code Kids.

**Theatre** — Performed at Edinburgh Fringe 2024; produced and acted in 15 Bristol DramSoc productions.