# Orlando Alexander

#### **EDUCATION**

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

- First-Class Honours, Year 1; top marks in Algorithms & Programming (87%), Matrix Algebra & Linear Models (86%), and Coding & Data Analysis for Scientists (83%).
- Proficient in Python, JavaScript, SQL, R, C, C#, and GitHub.

#### **A-Levels,** Berkhamsted Sixth Form (2017 - 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 wastewater head.
- 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 & Data Analysis.
- 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**

### **Data Science Lead,** 180 Degrees Consulting, Bristol (Sep 2024 - Present)

- Lead a team of 40 data science consultants to deliver pro-bono projects for 7 global social impact clients.
- Secured strategic industry partners, including Le Wagon and Accenture, to provide mentorship and training.
- Data Pipeline for Disease Analysis, EcoSwell (Jun Sep 2025)
  - Implemented an end-to-end data pipeline consolidating 18,850 entries from 5 years of weather, dengue, census, and expenditure data using Pandas, NumPy, and Selenium.
  - Valued at \$15,000 by the client, the project enabled predictive analysis of dengue outbreaks in Piura, Peru.
- Resource Management Platform, everyFAMILY (Feb Apr 2025)
  - Created modern React data management web app with Flask backend (Docker on GCP Cloud Run).
  - Reduced onboarding time by 30%; client rated project deliverables 5/5, stating it 'exceeded expectations'.
- Food Aid Analytics Dashboard, Cirencester Foodbank (Sep Dec 2024)
  - Built interactive dashboard processing 5,000 records spanning 3 years of food aid voucher referrals across 100 parameters using Pandas, NumPy, Matplotlib and Streamlit.
  - Delivered vital insights on regional demand and seasonal trends to drive targeted aid allocation.

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

- Designed and deployed full-stack, data-driven React platform with MySQL backend, automating scheduling. invoicing, and performance reporting for 50+ tutors, supporting company expansion.
- Saved 10 hours of administrative work weekly and became the organisation's most-used tool.

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

- Built machine learning platform for real-time manufacturing anomaly detection used by BMW, ABB, and SIG.
- Features drag-and-drop interface to build and simulate complex video analysis workflows in under five minutes.

### Al Chatbot Engineer, ConnectAl (Jan 2023 - Jan 2024)

- Developed GPT-40 LLM-powered customer support assistant for startups, including Digital Republic, providing 24/7 multilingual support for 5,000 messages per month.
- Implemented RAG workflows with real-time feedback loops, reducing first-level 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.
- Features offline logging and automated digital reporting for UN SDG climate goals.

### **Computer Vision Intern,** *Inovo Robotics, Guilford (Aug 2021)*

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

# **INTERESTS**

**Programming Teacher** — Tutored 300+ students in Python, Web Dev, Computer Science and ML at PMT and Spires.

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

**Gold Duke of Edinburgh Award** — Barista at social enterprise cafe; Grade 6 Cello.