# 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%).

#### **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.

# **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.

#### **Project Director,** Young Enterprise, Berkhamsted (Sep 2020 - Apr 2021)

- Generated £6,000 revenue from 300 international sales in 3 months, using sales data to streamline marketing.
- Led company operations (Excel, Power BI, Trello) and awarded Young Enterprise Journey Award for leadership.

## **INTERESTS**

#### **Programming Teacher**

Tutored 300+ students in Python, Web Dev, Computer Science and ML at PMT, Spires, and Code Kids.

#### 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.