

Lydia Koleosho

github.com/lia-213 | linkedin.com/in/lydia-koleosho

EDUCATION

The University of Edinburgh

Sept 2022 – May 2028

MInf Informatics (Computer Science)

Edinburgh, UK

- Relevant courses: Software Engineering and Professional Practice, Software Testing, Foundations of Data Science, Algorithms and Data Structures, Computer Security, Automated Speech Recognition, Computer Graphics (Geometry and Simulation), Object Oriented Programming.

King's College School, Wimbledon (KCS)

Sept 2019 – May 2021

International Baccalaureate Diploma, 43 points (HL Mathematics AA: 7)

London, UK

EXPERIENCE

Engineering Academy Participant

Oct 2025

Goldman Sachs

London, UK

- Explored engineering across Asset & Wealth Management, FICC & Equities, Risk, Investment Banking, and Site Reliability Engineering; shadowed engineers building large-scale data and software systems.
- Designed and pitched a mobile expense-tracking app in a team product-design challenge under tight time constraints.

Software Engineering Intern, Capital Technology

June – Aug 2025

J.P. Morgan Chase

Glasgow, UK

- Built data pipelines for securitised assets, deployed to pre-prod and UAT with bulk release scheduled for the following quarter, working within Agile delivery processes.
- Stack: Python, Databricks (PySpark, SQL), Liquibase, Jira, Bitbucket, Postman.
- Secured a return offer for a Summer 2026 internship.

Women in Technology Spring Week Intern

Apr 2024

Maven Securities

London, UK

- Gained hands-on exposure to proprietary trading and market making, including options trading, market dynamics, and market-making games; learnt core trading terminology (options, hitters, shields, quotes).
- Used Python (pandas, pivot tables) for trading-data visualisation and C++ for low-level work; debugged real company code via static/dynamic analysis, unit testing, and other techniques.
- Built a strong understanding of trading-data tracking, extraction, validation, and manipulation across binary data, strings, and files.

Spring into Technology Spring Week Intern

Apr 2024

J.P. Morgan Chase

Glasgow, UK

- Explored career paths in financial technology through sessions with industry leaders and technologists; competed in the #CodeForGood Hackathon and won the #MakeItHappen Ideathon (see Hackathons).
- Received a return internship offer.

Lead Tutor, Code Cadets

Feb 2024 – Present

Computing Club

Edinburgh, UK

- Leading delivery of coding clubs five times weekly across multiple classes; teaching Python, JavaScript, and HTML/CSS while building problem-solving and collaboration skills.

Course Co-Creator — “Living Together as Equals in Informatics”

Oct 2023 – May 2024

University of Edinburgh

Edinburgh, UK

- Co-developed a 50-hour course on gender dynamics, security, and equality in informatics labs, adopted for incoming School of Informatics students from 2024.

Class Representative, 2nd Year Computer Science

Sept 2023 – Apr 2024

University of Edinburgh

Edinburgh, UK

- Gathered and relayed student feedback on course content, delivery, and assessment to the School of Informatics through weekly meetings.

Data Product Intern

July – Aug 2023

Kubrick Group

London, UK

- Automated an onboarding-group allocation process using Python (Pandas) and OOP over large Excel datasets, factoring in academic background and aptitude-test scores.

Financial Analyst

Jan – Apr 2023

Prosper Social Finance — the UK's first student-run SRI fund

Edinburgh, UK

- Conducted socially responsible investment analysis from ESG and business perspectives, presenting financial models and analyses in Excel.
- Co-authored a 30+ page ESG-focused investment proposal on AIA (Hong Kong) covering executive summary, financial SWOT, management, industry, competitor, and macroeconomic analysis.
- Built and delivered a 10-minute pitch to an investment panel of industry experts, fielding follow-up questions on company fundamentals and macroeconomic factors.

Mathematics Tutor

Jan 2022 – Present

Harris Academy Wimbledon, Superstar Learners & Independent

London, UK

- Tutored 15+ students across KS2–A Level and US curricula in Maths and English, raising one student's GCSE Maths from grade 2/3 to grade 7 in nine months.
- Requested by the Assistant Principal at Harris Academy to run Year 11 GCSE interventions for 20–30 students, including 4-hour half-term sessions for up to 60 pupils.

ACADEMIC PROJECTS

Autonomous Golf-Ball Collection Robot | *Python, ROS, YOLOv8, OpenCV, Roboflow*

Jan – Apr 2026

- Designed a robustness-focused YOLOv8 vision pipeline for a TurtleBot robot automating tee-resetting in indoor golf simulators.
- Delivered a high-precision detection model (92.3% precision) integrated with a ROS navigation stack for reliable autonomous ball placement without human intervention.

Natural-Language Medical Drone Dispatch Platform | *Java, Spring Boot, FastAPI, Streamlit; 88%* Sept – Dec 2025

- Built backend microservices in Java (Spring Boot), Python (FastAPI), and Docker; integrated an LLM (Gemini) for natural-language scenario parsing.
- Created an interactive Streamlit frontend with PyDeck map visualisation and REST API communication.
- Subsequently the subject of a 741-test JUnit 5/Spring Boot test suite with GitHub Actions CI and JaCoCo coverage enforcement.

Ultramarathon Trends Analysis | *Python, pandas, NumPy, scikit-learn, matplotlib*

Feb – Apr 2024

- Analysed 7.4M race records to study participation and performance trends; cleaned and engineered features (pandas, NumPy, regex, datetime) and built EDA visualisations.
- Built regression models (linear, polynomial, multivariate) to predict finishing times ($R^2 \approx 0.30$); presented insights on gender disparity and peak-performance age.

University Self-Service Portal | *Java, Maven, Lucene, JUnit 5*

Jan – Apr 2024

- Built a Java self-service portal (Agile, MVC, UML) with authentication, FAQ management, Lucene keyword search, and external service integration; ensured quality with JUnit 5.

HACKATHONS

J.P. Morgan #MakeItHappen Ideathon – 1st Place (individual): independently conceptualised, wireframed, and pitched a food-app idea to spring interns across UK sites.

J.P. Morgan #CodeForGood – built an interactive website (HTML/CSS/SCSS, JavaScript, Python, Google Translate API) for a Scottish charity supporting Afghan refugees into tech roles.

Maven Securities Hackathon – used scapy to extract binary packet data from PCAP files. **AdaHack 2024** (Edinburgh). **HackUPC 2023** (Barcelona) – offline, multi-user in-flight experience for Vueling's challenge.

Mercuria Hackathon (Switzerland, 2022) – **2nd / 11**: selected from 200+ applicants and flown out; tackled CO₂ monitoring, voyage-route optimisation, and cargo logistics for the maritime energy transition.

TECHNICAL SKILLS & CERTIFICATIONS

Languages: Java (OOP), Python (pandas, PySpark, PyQt5), C++, C, SQL, JavaScript, HTML/CSS, SCSS

Tools & Frameworks: Spring Boot, FastAPI, Docker, Databricks, ROS, OpenCV, YOLOv8, Lucene, JUnit, Git, Jira, Excel

Spoken Languages: English (native), Spanish (B2/C1), French (B1/B2)

Certifications: Databricks Certified Data Engineer Associate

Programmes: Startup Basics — Edinburgh Innovations, University of Edinburgh (June 2026): idea generation, customer validation, MVP development, lean canvas, and pitching