

Daniel Lambert

danbudcs@gmail.com | +447972811678 | [Github](#) | [LinkedIn](#)

Education:

University of York

Mar 2024

Msc Computer Science – 2:1 (3.7 GPA)

Relevant Coursework: Algorithms & Data Structures, Computer Architecture & Operating Systems, Advanced Programming, Computer & Mobile Networks, Artificial Intelligence & Machine Learning, Software Engineering

Experience:

Balyasny Asset Management

June – August 2023

Incoming Software Engineer Intern

Popdot

May 2022 – February 2023

Software Engineer Intern

- Created API endpoints using Django for users signing up to the application and updating account information.
- Designed a JSON validation script using Python to find duplicate login credentials for preventing multiple user accounts, reducing sign-up errors by 35%.
- Coordinated with the front-end team to ensure API endpoints are functional and can be merged with existing code.
- Improved Swagger documentation for internal APIs, leading to a reduction of 25% in developer search time.
- Researched and created error response codes for internal issues to ensure clear understanding of application bugs.

CodingForKids

September 2021 – April 2022

Computer Science Tutor

- Created a computer science curriculum using Java for students interested in science and technology, resulting in 96% of students being interested in pursuing a career in STEM.
- Designed a series of lectures and workshops for advanced students to improve object-oriented programming and project building abilities.
- Collaborated with team members to form a comprehensive plan of future lessons, resulting in a reduction of 50% in lesson and project planning time.

Projects:

Crypto Algo Trader Bot | C++, Python, SQL, pandas, matplotlib, numpy

| [Code](#)

Automated cryptocurrency trader with a portfolio dashboard for tracking and managing orders.

- Implemented low-latency trading strategies to trade cryptocurrencies and update the dashboard in real-time.
- Formulated backtested strategies for automated speculation on a cryptocurrency's bid/ask price.
- Enabled a live chat function, for traders and users of the application to communicate through the dashboard.
- Added user account options to save personal settings and retain speculative investment strategies.

Human Detection Camera | Python, OpenCV, numpy

| [Code](#)

An automated human detection application with options for facial recognition and identifiers.

- Uses built-in webcams or external devices to automatically record when the detection has been activated.
- Utilized the Histograms of Oriented Gradients approach for optimized detection, while maintaining an accuracy of 98.5% in human detection.
- Identifies individuals through facial recognition and labels the frame with a 96% accuracy.
- Added user options for detecting other specified objects or animals in conjunction to human detection.

Shortest Route Mapping | Python, pygame

| [Code](#)

A route mapping application allowing the user to see the process of route-finding algorithms.

- Implemented the A* search algorithm for finding the shortest path from the starting point to the end point, based on the user design of the blocking walls.
- Designed a sandbox environment for users to dynamically change the walls, start and end points.
- Added options for timing the pathfinding algorithm for comparison against similar algorithms in the same state.

Technical Skills:

Languages: C++, Python, Java, OCaml, SQL

Tools & Libraries: Git, Linux, AWS, Hadoop, GraphQL, MongoDB, Docker

Intermediate in Swedish, German, and Mandarin