MIRANDA GOUGH

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EDUCATION

School of Computer Science, University of Leeds

Sep 2022 – Jun 2026

BSc Computer Science, predicted first class honours (84%)

Relevant modules: Software Engineering, Web Application Development, Operating Systems, Artificial Intelligence, Algorithms I & II, Secure Computing, Machine Learning, Distributed Systems

Denmark Road High School

Sep 2020 – Jun 2020

A-Levels: Computer Science (A*), Mathematics (A*), Further Mathematics (A*), Spanish (A*)

RELEVANT EXPERIENCE

Intern - Data Scientist and Machine Learning Engineer in the AI Research team

Jun 2024 – Aug 2025

- PwC UK
 - Built a robust Python library for safety assessments of models based on SOTA domain research and implemented reusable pipelines, reducing the time taken for testing from 1 week to 10 minutes.
 - Developed machine learning pipelines for secure LLM fine-tuning allowing old classified documents to be repurposed as training data for customised internal chatbots with higher utility and more relevant output.
 - Implemented testing that identified critical vulnerabilities in chatbot applications built for clients, collaborating with the development team to apply fixes before deployment.
 - Created an interactive AI safety testing demo application that brought in new clients.
 - Ran a hackathon for the cyber security team identifying weaknesses and mitigations in AI applications where I presented and ran workshops for 40+ attendees.

Intern - Software Engineer in the Data & Automation team

Jun 2023 – Aug 2023

PwC UK

 Developed automations for common manual tasks in the form of macros and web applications, allowing nontechnical employees to streamline their workflow.

VOLUNTEERING

President, Diversity & Inclusion Secretary

Jun 2023 – Present

University of Leeds Computing Society

- Responsible for leading a 10-person committee and managing external partnerships.
- · Organised industry speakers, skills workshops, CTFs, and social events, increasing student satisfaction and providing career development opportunities to 250+ members. Built a community for female and non-binary members.
- Developed a new society website using Next.js increasing the society's visibility and professionalism.

Co-founder and Experience Lead

Jun 2024 - Present

LeedsHack

- Co-founded the University of Leeds student hackathon. Liaised with sponsors to secure £9.5k in funding and coordinated all sponsor-led challenges on the day of the event.
- Successfully managed ticketing, scheduling, communications, and welfare for 85 participants.

SKILLS

Programming languages: Python, C, C++, Java, JavaScript, TypeScript, SQL

Technologies: Git, GitHub, Docker, Poetry, Linux, Azure, GCP, Databricks, React, Next.js, Tailwind CSS, Flask, SQLite, LangChain, PyTorch, MLFlow, Streamlit, NumPy, Pandas, Scikit-learn, NLP

Other achievements: B2 level in Spanish, 3rd placed Leeds team at UKIEPC 2025, Microsoft Office Specialist certification

PROJECTS

- Online game for navigating the UK public transport system using React, Flask, GeoPy and the Google Maps API.
- Shell for the xv6 operating system written entirely from scratch in C.
- Sentiment analysis pipeline to detect bias in multilingual Wikipedia articles using Python and NLTK.
- Web application for visualising and sharing exercise data as GPX files using React, Flask and SQLite.
- Research report into the effectiveness of machine translation for under-resourced language pairs.