

# Hirad Fakouri

hiradfakouri@gmail.com | +44 7492674381 | [linkedin.com/in/hiradfakouri/](https://www.linkedin.com/in/hiradfakouri/) | [github.com/HiradFakouri](https://github.com/HiradFakouri) | [hiradfakouri.com](https://www.hiradfakouri.com)

## EDUCATION

- BSc Computing Science — University of Glasgow** Sep 2025– Present  
Graduated Jun 2025
- **Skills:** Object-oriented programming, Algorithms and data structures, SWE methodology and databases
- Eastwood High School — Newton Mearns, Scotland**
- **Advanced Highers:** Maths (A), Computer Science (A), Physics (B)
  - **Highers:** Mathematics (A), Physics (A), Computer Science (A), Music (A), ESOL (A), English (C)

## EXPERIENCE

- Software Engineer – Path Planning & Algorithms — UGRacing Driverless, University of Glasgow** Sep 2025 – Present
- Designed and implemented a minimum-curvature racing line optimiser in Python and ROS2 for real-time autonomous path planning on the Formula Student car.
  - Built a velocity profiler integrating Pacejka tyre physics and curvature-based speed limits, deployed within the full ROS2 stack.
  - Collaborated cross-functionally with perception and hardware engineers in a fast-paced, deadline-driven environment.
- Treasurer & Committee Member — Glasgow University Persian Society (GUPS)** Jan 2026 – Present
- Manages society finances and budgeting for events serving 50+ members.
  - Led committee restructure, designing a 10-role flat organisational structure to improve operational efficiency.
- Founder – Code Lab — Eastwood High School** 2022 – 2025
- Founded and ran a coding club teaching programming fundamentals, increasing student engagement by 40%.
- Head Boy — Eastwood High School** Aug 2024 – Jun 2025
- Represented 1,000+ students, liaising between student body and staff to improve school experience.
  - Delivered public speeches and coordinated school-wide events.

## PROJECTS

- SKOPE – Financial SaaS Platform — Co-Founder · Next.js, Express.js, MongoDB (Early Stage)** April 2026 – Present
- Co-founding a fullstack SaaS platform built on Next.js, Express.js and MongoDB.
  - Architecting a backend system that runs financial calculation models and passes structured outputs to an AI layer for report generation.
  - Integrating the Anthropic API to convert structured financial data into readable plain-English reports exported as PDFs.
- AI Admin Automation Tool — Solo · Python, FastAPI** 2025
- Built a personal automation tool using Python and FastAPI handling file management, email workflows and reminders.
  - Designed a modular backend combining multiple APIs into an end-to-end automation pipeline with AI agent integration for intelligent task routing.
- SleePT – AI Chat Agent [github.com/HiradFakouri/SleePT](https://github.com/HiradFakouri/SleePT) — GUTS Hackathon · Backend Engineer** oct 2025
- (Team of 5)
- Built a real-time AI chatbot using Next.js, Express.js, WebSockets, MongoDB and the OpenAI API.
  - Engineered backend infrastructure handling concurrent WebSocket connections and LLM API integration.
- GUI Image Filtering App [github.com/HiradFakouri/filter-webGUI](https://github.com/HiradFakouri/filter-webGUI) — Solo · Next.js, Express.js,** 2024
- Python Pillow
- Fullstack web app applying user-selected image filters (greyscale, blur, edge detection) via a Python processing backend.

## COURSES & CERTIFICATIONS

- Harvard CS50x — Introduction to Computer Science
- Stanford University — Introduction to Statistics
- Udemy — Rust Programming

## SKILLS

- Languages:** Python, JavaScript, HTML/CSS, SQL, C, Rust(basic), Visual Basic
- Frameworks & Tools:** Node.js, Express.js, Next.js, FastAPI, ROS2, MongoDB, SQL, Flask, Git/GitHub, Tailwind CSS
- Areas:** Full Stack Development, AI Agents & Automation, Path Planning Algorithms, RESTful APIs, WebSockets
- Spoken Languages:** English (native), Persian (native)

## ACTIVITIES & INTERESTS

- Silver Duke of Edinburgh Award — demonstrated resilience, teamwork and self-discipline.
- Jazz Band member — performed guitar and bass guitar in school concerts.
- Interests: competitive programming, AI/ML, entrepreneurship, gym, music production.