SHAYAN HAGHIGHI

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Computer Science student with predicted 1st class honours (avg. 85%), with hands-on experience in backend engineering, machine learning, and cloud automation. Strong interest in automated and isolated testing.

EDUCATION

University of Birmingham - Computer Science BSc *(09/2022 - Present)*

- Module average - 85% (1st Class Honours)
- Key modules - Object Oriented Programming (100%), AI (95%), Security and Networks (93%)

St. John the Baptist School *(09/2020 - 08/2022)*

- A-Level Grades: A* - Maths, Further Maths, Physics
  A - Psychology.

WORK EXPERIENCE

Software Engineer - Mimecast *(09/2024-2025)*

- Enhanced service reliability by developing a custom Spring Boot proxy, improving test reliability to 98%
- Delivered technical presentations to 40+ engineers and QAs, introducing our new testing strategies
- Created and managed multiple CI/CD pipelines for automated testing in containerised environments using Jenkins and Docker
- Automated Cucumber test generation for peripheral service, increasing coverage from 33% to 100%

Teaching Assistant - University of Birmingham *(09/2025-present)*

- Helped run lab sessions for over 500 students weekly for the Object Oriented Programming module
- Increased student satisfaction with the module by 12%

Personal Tutor *(09/2023-2025)*

- Tutored 4 students using tailored communication and teaching skills, adapting to students' diverse learning styles to distil complex ideas into understandable chunks
- Improved the students' predicted grades by 2 levels on average

PROJECTS

github.com/ShayanHaghighi

Indoor Dog Tracker using Nest Cameras

- Built an end-to-end computer vision system using Google Cloud Pub/Sub and the Nest SDM API to stream and process 1000s real-time camera events daily for indoor dog tracking
- Trained and refined a custom YOLOv8 model, improving accuracy from 30% to 90%
- Integrated with Label Studio for easy labelling and automated model retraining with Jenkins pipelines, enabling accurate pet monitoring and automated model improvement

NLP Entity-Linking-Based Note Taking App (in progress)

- Built a Spring Boot app for semantic note-taking with NLP-based keyword extraction and entity linking
- Integrated Wikipedia's category hierarchy to organise notes into interactive tree and graph views
- Implemented RAG-based natural language querying to let users search notes through an LLM interface, allowing for both intelligent knowledge organisation and semantic search

Patient Data Management and Visualisation System (Hackathon)

- Developed with Flask, NextJS frameworks for rapid development, creating an MVP in under 12 hours
- Utilised Three.js library to display lesions on a 3D model and ApexCharts to provide summary statistics
- Presented our app in a sales pitch, placing us 2nd in a hackathon with 44 participants

SKILLS

Languages: Java, Python, HTML5, CSS3, JavaScript, TypeScript, SQL, C, C#,
Frameworks/Libraries: Spring Boot, React, Flask, PyTorch, OpenCV, Cucumber, NextJS, Angular, Three.js
Tools: Git, Docker, Jenkins, GCP, Redis, PostgreSQL, SQLite, MockServer, Label Studio
Other: Video editing (DaVinci Resolve), Photoshop, Persian (Native Fluent)