

Zohaib Ehtesham

☎ +44-7513376637 🌐 Zohaib-Eh 💻 Zohaib Ehtesham ✉ zohaib.ehtesham@gmail.com 📁 Portfolio

EDUCATION

B.Eng. (Honours) Computer Systems Engineering

Brunel University of London

Expected June 2025

Grade: First (Expected)

EXPERIENCE

Nissan Technical Center Europe | *Software Test Engineer*

August 2023 – August 2024

- Led the testing for the voice recognition feature in the infotainment system for the European region.
- Collaborated with cross-functional teams and the global feature owner for Google Automotive Services and Amazon Alexa, resolving all concerns before production for Qashqai MY2024
- Conducted extensive testing of In-Vehicle Infotainment (IVI) software, leveraging advanced debugging tools such as CANalyzer and knowledge of CAN architecture.
- Enhanced test monitoring by developing a full-stack app (React.js & FastAPI) to import test cases into TestRail.

Indian Institute of Science (IISc) | *Research Intern*

June 2023 – July 2023

- Awarded the prestigious Turing Fellowship to research Human-Robot Collaboration at IISc, focused on computer vision and machine learning for gesture recognition.
- Created a hand gesture recognition model using OpenCV, MediaPipe, and TensorFlow with 96.67% accuracy and low error rates. Calculated UR5 robot kinematics using MATLAB and Python, implementing them with RoboDK.
- Developed a solution enabling workers to collaborate with UR5 robot using hand gestures captured by camera.

Brunel University London | *Summer Student Intern*

August 2022 – September 2022

- Contributed to a research project by the Life Sciences and Computer Engineering Department, on loneliness.
- Engineered an emotion prediction model and used it alongside the Google Cloud NLP API for feature extraction to engineer the Loneliness Prediction Model. Emotion Prediction Model had an accuracy of ~70% and Loneliness Prediction Model had root mean squared error ~2 units for the UCLA loneliness scale ranging from 1-9 units.

Infoglen | *Apex Development Trainee*

July 2022 – August 2022

- Automated Salesforce data processes by developing and testing Apex code, utilized SOQL/SOSL for data management, and performed data modeling, including schema design and entity-relationship definition.

TECHNICAL SKILLS

Strong experience with Python, JavaScript, TypeScript, Apex (Salesforce), Tensorflow, React.js, Next.js, Django, Fast-API, SQL, SOQL, Github, Jira

Proficient in Docker, Java, AWS, GCP, NLP, scikit-learn, MongoDB, Github Actions, Vitest, Pytest

Certifications: AWS Certified Cloud Practitioner (CLF-C02)

PROJECTS

To-Do App | *React.js, FastAPI, Vitest, Pytest, AWS, Docker, Github Actions* 🌐

Personal Project

Developed and deployed full-stack To-Do app with automated unit tests (Vitest, Pytest) and CI/CD via GitHub Actions. Containerized backend with Docker for deployment to AWS ECR; served frontend via S3 + CloudFront for fast delivery.

Hack the Wallet | *Next.js, Starknet, HTML, CSS, Web3, Gemini API* 🌐

Encode AI Hackathon

Created an interactive AI agent game using the Gemini API and Starknet (Web3), enabling users to interact with dynamic NPCs through natural language prompts and receive crypto rewards. Gained hands-on experience with AI prompt engineering, Web3 integration using Starknet, and smart contract interaction.

Calorie Tracker | *Next.js, HTML/CSS, MongoDB, LLaVA* 🌐

Royal Hackaway V8

Collaborated with a team of four to develop an AI-powered app that estimates calories from images and tracks nutrients using LLaVA (Large Language & Vision Assistant). Led the front-end development for a user-friendly experience.

AWARDS

2025 Encode AI Hackathon - 1st Prize Winner (Main Track) + 2x Bounties

2025 Royal Hackaway V8 - 3rd Place Winner in Environmental Hack

2023 Royal Hackaway V6 - 3rd Place Winner

2021 Google Developer Students Club Haxmas Hackathon - Winner (in Education Track)

2020 International Real World Design Challenge - Grand Prize