Anzer Khan

Software Engineer | Huddersfield, United Kingdom anzerkhan27@gmail.com | https://www.linkedin.com/in/anzer-khan-31a14a209/ | https://github.com/Anzerkhan27

Professional Summary

Software Engineer specialising in Machine Learning, backend development and cloud infrastructure. Experienced in building scalable machine learning pipelines, developing backend APIs with Python frameworks, and deploying full-stack applications on cloud platforms. Proven track record of delivering real-world engineering projects, including developing accessibility auditing solutions at AUDITSU and leading software development for the University of Huddersfield's first aerospace student team participating in the UKSEDS Olympus Rover Trials. Skilled in Linux-based system operations, mobile automation, and full-stack system design, with a passion for building reliable, intelligent, and impactful software solutions. Experienced in taking ownership of full engineering pipelines, from problem research to scalable cloud deployment.

Technical Skills

- Python, Java, C++, JavaScript | Cloud Infrastructure: Linux (Ubuntu), AWS, Azure, DigitalOcean
- Backend Development: Django, FastAPI, Flask | Frontend: React, Vue.js (basic)
- Machine Learning: Deep Learning (CNNs, Medical Imaging), LLM Prompting
- Mobile Automation: Appium, ADB, Android Emulators
- DevOps & Version Control: Git, GitHub Actions, System Orchestration

Professional Experience

Software Engineer

AUDITSU (formerly IMAGINaiTION) | Jun 2024 - Present

- Initiated and developed a proof-of-concept platform for automated accessibility auditing of Android apps, using Appium, ADB, and headless Android emulators on cloud-based Ubuntu servers.
- Independently researched accessibility compliance standards (EN 301 549, WCAG) and engineered dynamic traversal algorithms to extract runtime UI metadata for automated validation.
- Built scalable backend systems with FastAPI and Python, integrating cloud storage (DigitalOcean Spaces) for report generation and audit management.
- Designed and integrated LLM-based pipelines to generate contextual accessibility labels for UI elements using vision-language models.
- Contributed to AUDITSU's successful early funding and expansion, translating academic research into a real-world startup solution.
- Contributed to the engineering excellence that led to AUDITSU being shortlisted as AI Startup of the Year 2025 by the UK StartUp Awards.

Software Lead (Volunteer)

Team Ray, University of Huddersfield | May 2024 - Present

- Founding committee member of the university's first aerospace society, contributing to both technical development and organisational branding.
- Led rover software development for the UKSEDS Olympus Rover Trials 2025, designing systems for autonomous Mars-like terrain navigation, QR image capture, and real-time telemetry over constrained wireless links.

- Developed a full-stack promotional website (React frontend, Django backend) and established the society's digital presence, including merchandise design, branding, and social media outreach.
- Built a QR code detection platform with OpenCV and Streamlit, containerized with Docker, and deployed on Railway for rover mission testing.
- Project ongoing; preparing for a live mission challenge in July 2025.

Web and VLE Assistant (Industrial Placement year)

University of Huddersfield | July 2021 - July 2022

- Maintained and updated university web portals using HTML, CSS, JavaScript, and Bootstrap.
- Developed interactive web elements to enhance user engagement and navigation experience.
- Developed user documentation and provided technical support during the shift to online learning environments.

Education

MSc Artificial Intelligence (Distinction)

University of Huddersfield | Jan 2024 - Dec 2024

- Modules: Machine Learning, Autonomous Systems, Artificial Intelligence planning, Robotics, Knowledge Representation
- Project: Developed accessibility auditing MVP, securing initial startup funding.

BSc (Hons) Software Engineering - First Class Honours

University of Huddersfield | Sept 2019 - July 2023

• Modules: Artificial Intelligence, Algorithms and Data Structures, Distributed Systems,

Key Projects

Automated Accessibility Auditor for Mobile Apps (Auditsu- Ongoing)

- Built platform using Appium, ADB, and Python for dynamic metadata extraction and automated accessibility validations.
- Developed traversal engine, metadata-based audits, and LLM integration for label generation.

Mars Rover Navigation and Communication System (Team Ray - Ongoing)

- Led navigation, wireless telemetry, and QR image processing for rover mission in UKSEDS Olympus Rover Trials 2025.
- Built and deployed QR code detection tools with OpenCV and Streamlit for field testing.

Deep Learning Solutions for Healthcare Applications

- Built CNN pipelines for pneumonia detection, brain tumor segmentation, and attention span detection using medical and facial imagery.
- Designed full ML pipelines including preprocessing, model optimization, and evaluation.