

IBRAHIM ALHARTHI, Machine Learning Engineer

github.com/ibraKH linkedin.com/in/ibrahimalharthi devibrakh@gmail.com +966 500404407

PROFESSIONAL SUMMARY

I'm a builder at heart, motivated by turning ambitious ideas into useful products and bringing people together to make them happen. My experience spans AI, computer vision and software engineering, including leading an 8-person engineering team from architecture through delivery. I enjoy taking ownership, learning quickly and tackling difficult technical problems alongside collaborative teams.

SKILLS

Languages: Python, TypeScript, JavaScript, SQL

ML/AI: PyTorch, Scikit-learn, OpenCV, YOLO, CLIP, PEFT

Frontend: React, Vite, Angular, Astro, Tailwind CSS

Backend/ML Systems: FastAPI, Node.js, Express, REST APIs, PostgreSQL/PostGIS

DevOps/Cloud: Docker, GitHub Actions, CI/CD, AWS, nginx, Linux

Testing & Quality: Jest, Supertest, Swagger/OpenAPI, code review

EXPERIENCE

Jul 2025 — Jun 2026

Lead Software Engineer, Australian National University Canberra

- Led an 8-person team building a collaborative scientific platform for TERN and CSIRO, delivered through ANU's TechLauncher capstone programme.
- Founded and owned the TypeScript/PostgreSQL/PostGIS backend across 23 tables and 14 migrations, including JWT authentication with email verification and per-model role-based access control.
- Shipped the real-time collaboration layer on Socket.IO: presence, TTL-based node locking, threaded comments and milestone snapshots.
- Set the engineering baseline from day one — multi-stage Docker builds, GitHub Actions CI/CD, Swagger-documented APIs and a Jest suite of 32 test files. Sole owner of CI throughout.
- Reviewed and merged 26 of 31 production PRs; a diff-level contribution audit showed primary authorship of 12 of the platform's 14 functional areas.

Feb 2024 — Jun 2024

Software Engineer, Nortal Riyadh

- Built responsive production interfaces using React and JavaScript.
- Collaborated with designers and engineers to translate requirements into user-facing features.

Jul 2023 — Aug 2023

Computer Engineer Training, King Fahd Air Base Taif

- Trainee across Networking, IPT and Maintenance departments: network functionality, telephone line configuration and hardware/software fault resolution.

Dec 2022 — Apr 2023

Web Developer (Freelance) Remote

- Built a company website in React and Bootstrap using responsive design principles, implemented SEO strategies that improved search rankings, and owned deployment end-to-end.

EDUCATION

Jul 2024 — Present

Master of Machine Learning and Computer Vision, Australian National University Canberra

- Conferral December 2026. SDAIA AI Scholarship recipient, selected to pursue postgraduate study in Artificial Intelligence at ANU.

Sept 2018 — Aug 2023

Bachelor of Engineering in Computer Engineering, Taif University Taif

Sept 2022 — Dec 2022

Nanodegree, Full Stack JavaScript Developer, Udacity Online

PROJECTS

CLIP Few-Shot Vision-Language Learning

Python · PyTorch · CLIP · PEFT

- Developed few-shot image-classification experiments using CLIP, Tip-Adapter++, CoOp/CoCoOp and PEFT in PyTorch.

Transformer Language Modeling | NanoGPT

Python · PyTorch · GPT-2 · NLP

- Trained 3 × 29.9M-parameter GPT models under matched hyperparameters, building a leakage-free BPE pipeline and custom token-weighted perplexity evaluation.

Roya | Multimodal AI & Computer Vision Platform

Python · FastAPI · YOLO · PyTorch · OpenCV · OCR · React · LLMs

- Built an end-to-end multimodal AI platform integrating YOLO, OCR, geospatial analysis and LLMs, with visual workflows spanning ~1,000 images.

CERTIFICATIONS	AWS Cloud Technical Essentials		Entrepreneurship and Innovation	
AWARDS	SDAIA AI Scholarship (2024)		Graduating early badge, RISE program	
LANGUAGES	English	Professional working (IELTS 7.0)	Arabic	Native speaker