

# KAAN ÇAVDAR

AI Engineer · Applied Researcher

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## SUMMARY

Computer Engineering graduate with production AI experience at Microsoft and generative-model research experience through TÜBİTAK's 2247-C STAR program. Comfortable across the full stack from training and fine-tuning diffusion and GAN architectures in PyTorch to shipping LLM-powered features into real applications. Currently focused on modern agent architectures, the Model Context Protocol, and LLM evaluation systems.

## AI & RESEARCH EXPERIENCE

### Independent AI Engineering & Research

Dec 2025 – Present

- Rebuilding depth around the current AI engineering stack: agent architectures and tool calling, Model Context Protocol (MCP), retrieval systems, and LLM evaluation.
- Building a virtual try-on mobile app (Flutter + Python inference service) using diffusion-based VTON models, with an async job queue for multi-second generation and benchmarking against commercial APIs on fidelity, latency, and cost.

### Microsoft Software Engineer

Istanbul, Türkiye · Jul 2025 – Sep 2025

- Built a real-time, map-based news platform that fetches and visualises global and local events against the user's live coordinates.
- Integrated transformer models to automate news classification and de-duplication across multiple web sources, removing redundant and low-signal content.
- Designed an AI severity-scoring engine that categorises events and drives a colour-coded alert system with dynamic impact radiuses.
- Shipped on React Native and Firebase, optimising spatial queries for low-latency rendering of geographic pins and data layers.

### TÜBİTAK Research Intern, 2247-C STAR Program

Adana, Türkiye · Sep 2024 – Feb 2025

- Developed and trained CycleGAN architectures in PyTorch for burst image restoration, with systematic performance analysis and image-quality evaluation.
- Engineered and fine-tuned LoRA-based diffusion models for day-to-night image translation, using generative AI for synthetic data generation and iterative model refinement.
- Bridged research and production by packaging experimental models into reproducible pipelines with reliable execution and efficient data workflows.

## SOFTWARE ENGINEERING EXPERIENCE

### MoonadSwap Full-Stack Software Engineer

Adana, Türkiye · Oct 2025 – Dec 2025

- Designed and implemented end-to-end business flows from UI through backend, including API-driven user onboarding and interaction tracking.
- Modelled structured data for user metadata and analytics to support efficient querying and reporting.

### VOLTGO Charging Services Software Engineer

Adana, Türkiye · Jul 2024 – Aug 2024

- Built production mobile interfaces with complex form flows, validation logic, and backend API integration, focused on usability and visual consistency.

## LEADERSHIP & COMMUNITY

### Çukurova Blockchain Board Member

Adana, Türkiye · Aug 2023 – Present

- Led technical workshops on blockchain fundamentals, crypto ecosystems, and decentralised applications for university audiences, and organised community events and hands-on projects across the Mediterranean region.

## EDUCATION

### Çukurova University B.Sc. Computer Engineering

Adana, Türkiye · Graduated Sep 2025

## SKILLS

**AI & LLM Systems:** Agent architectures & tool calling, Model Context Protocol (MCP), RAG & retrieval, prompt and context engineering, LLM evaluation

**ML & Research:** Python, PyTorch, Hugging Face (Transformers, Diffusers), CycleGAN, LoRA fine-tuning, diffusion models, computer vision, image restoration, synthetic data generation, model optimisation

**Engineering:** React, React Native, TypeScript, JavaScript, C#, .NET Web API, RESTful services, Tailwind CSS, SQL Server, PostgreSQL, Firebase, Git

**Web3:** Blockchain fundamentals, smart contracts, Web3.js / Ethers.js

**Languages:** Turkish (native), English (professional working proficiency), Mandarin Chinese (beginner)