GOKTUG MERT OZDOGAN

Junior AI Engineer
goekmeroz@gmail.com | +90 506 181 36 75 | Istanbul, Turkey
linkedin.com/in/goktugmertozdogan | github.com/gokmeroz | gokmeroz.com

PROFESSIONAL SUMMARY

AI Engineer building agentic LLM systems end-to-end in Python. Co-built ReproBot, a 7-stage multi-agent pipeline that reproduces published ML results from the paper PDF alone, including WRN-28-10 on CIFAR-10 at GPU scale (3.83% vs. 4.00% reported), with sandboxed execution of generated code and deterministic evaluation. Independently shipped Nummoria, an AI-powered personal finance SaaS with LLM tracing and evals. Enterprise delivery experience at Halkbank (10,000+ employees).

EDUCATION

BAHCESEHIR UNIVERSITY Istanbul, Turkey
Bachelor of Science (B.Sc.) in Computer Engineering Aug 2025

PROJECTS

REPROBOT — Multi-Agent LLM System for ML Paper Replication github.com/EngincanVaran/ReproBot
AI Engineer (4-person team), inzva AI Projects #10 Jun 2026 - Present

- Developed a **7-stage multi-agent LLM pipeline** (Python, Claude VLM, PyTorch, scikit-learn, Docker) that turns an ML paper PDF into an executed training run and a claim-by-claim replication report, orchestrated via shared state and retry loops.
- Led the GPU-scale validation: ReproBot's unmodified generated script trained **WRN-28-10 on CIFAR-10** (50K images, 200 epochs) on a rented RTX 4090 in 3.4 h, reaching **3.83% test error vs. 4.00% reported**.
- Reproduced **5 further papers across 5 model families** at full fidelity on CPU; all classification results **within 0.7 pp** of published values, with Critic verdicts matching manual review on 5/5.
- Engineered **sandboxed execution of LLM-generated code** (Docker, 3 pre-execution gates); live learning-curve monitoring halts stalled runs and routes failures back to the Coder.
- Designed **deterministic evaluation**: arithmetic verdicts against noise-derived tolerances instead of LLM-as-judge, extra seeds when inconclusive, and paper-cited code reviews; **88% test coverage** via pytest replay tests of real runs.

NUMMORIA — AI-Powered Personal Finance SaaS nummoria.com · github.com/gokmeroz/nummoria
Full-Stack Engineer & Product Owner Oct 2025 - Present

- Architected and deployed a personal finance SaaS **as sole engineer** on web and iOS (Node.js, React, React Native/Expo, MongoDB, Redis/Bull) through TestFlight release; OCR-based receipt and statement ingestion cut manual entry by **~70%**.
- Engineered **LLM observability** from scratch: every model call traced with tokens, latency, and cost against a versioned price table, plus prompt version and content hash to catch silent prompt edits; payloads PII-redacted and TTL-expired in production.
- Designed a **confidence-gated extraction cascade**: deterministic CSV/PDF parsers score per-field confidence and escalate to Gemini/GPT only below threshold; evaluated on a **50-case golden set** across 3 bank layouts with per-layout field-level F1.
- Delivered a **transaction-grounded AI advisor** (Gemini 2.5 Flash, GPT-4o-mini) with rule-based fallback and rate limits.

EYEHUB — TÜBİTAK Government Research Project 122E085 Istanbul, Turkey
Backend Engineer Nov 2023 - Jun 2024

- Coordinated cross-functional work in a **4-person engineering team** (2 backend, 2 mobile), aligning API contracts and priorities with the mobile developers.
- Communicated progress to stakeholders, demoing milestones to project founder and lead Prof. Günet Eroğlu and the university research team and turning academic requirements into backend workflows.
- Built secure **Node.js REST APIs** and validated **MongoDB** data models for a TÜBİTAK-funded dyslexia detection app (mobile sync, authentication, real-time data submission); deployed on **AWS EC2 and Lambda**.

WORK EXPERIENCE

HALKBANK Istanbul, Turkey
Full-Stack Software Engineering Intern Apr 2025 - Jul 2025

- Implemented a Personnel Absence System for **10,000+ employees** of one of Turkey's largest state-owned banks, building attendance-tracking logic in C#/.NET Core across **75+ relational tables** (holidays, medical leave, approvals).
- Developed full-stack reporting workflows in Angular and ASP.NET Core for real-time data processing across **800+ branches**.

COMPRO Istanbul, Turkey
Software Engineering Intern Aug 2023 - Oct 2023

- Containerized legacy backend environments at an IBM Business Partner using **Docker, CI/CD, and Linux** for cloud migration proofs of concept, internal development, and client demonstrations.
- Evaluated **AWS vs. IBM Cloud** on compute, storage, orchestration, and cost to inform migration strategy.

SKILLS

Programming: Python, TypeScript, JavaScript, C#, SQL
AI & LLMs: Large Language Models (LLMs), Generative AI, multi-agent systems, prompt engineering, LLM evaluation, LLM observability, structured outputs, model cascades, sandboxed code execution, Claude, OpenAI & Gemini APIs
Machine Learning: PyTorch, scikit-learn, NumPy, Pandas, deep learning, computer vision (CNNs), NLP, GPU training
Backend & Full-Stack: FastAPI, Node.js, Express, ASP.NET Core, React, React Native, Angular, REST APIs, OAuth 2.0, JWT
Infrastructure: Docker, AWS (EC2, Lambda, S3), Redis, MongoDB, PostgreSQL, SQL Server, CI/CD, Git, Linux, Agile/Scrum
Languages: Turkish (Native), English (Full Professional Proficiency), German (B2)