Mustafa Eren KOÇ

Software Engineer · Mobile, Backend & Data Products

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Summary

Computer Engineering graduate (ITU, 2026) who ships complete products: native iOS and Android apps, Python/FastAPI backends and the data pipelines behind them. Built **Klaris** (1.5 million+ products), **Hocam Kim?** (200,000+ academics, about 4.9 million publications) and **TRBio** (two submitted first-author manuscripts). Also brings two and a half years of part-time bank IT audit experience and a second B.S. in Business Administration.

Projects

Klaris klaris.com.tr · Founder & Software Engineer *Mar 2026 – Present*

- Designed, built and launched a cosmetic-ingredient app single-handedly (App Store and Google Play, September 2026): a barcode scan returns plain-Turkish ingredient explanations and a product score with open reasoning.
- Native iOS (Swift, SwiftUI, StoreKit) and Android (Kotlin, Jetpack Compose, ML Kit) apps on a FastAPI, PostgreSQL and Redis backend and a Python pipeline behind a 1.5 million+ product catalog; self-hosted with Docker, Nginx and CI/CD.
- Product score and a personal match on four skin and four hair dimensions; 16,000+ tests, six codebases.

Hocam Kim? hocamkim.com · Founder & Software Engineer · Independent Public Project *Oct 2026 – Present*

- Built a public directory of 200,000+ academics across 235 institutions with about 4.9 million deduplicated publications (Meilisearch), linking 111,000+ of them to OpenAlex via ORCID and shared DOIs.
- Open, versioned scoring method with eight components (SJR quartiles, citation percentiles, projects, theses, collaboration, patents), recomputed daily within each field; FastAPI, MongoDB, 7,600+ tests.

TRBio — Bioinformatics Portal of Türkiye trbio.info · Co-Founder & Software Engineer *Sep 2025 – Present*

- Built the identity-resolution, master-data, scoring and portal layers linking national records to OpenAlex via ORCID.
- First author of two manuscripts submitted to Briefings in Bioinformatics and Database (Nov 2026).

Experience

Kuveyt Türk Participation Bank · IT Auditor (Part-Time) · *Kocaeli* *Jan 2024 – Jun 2026*

- Audited IT general controls (access, change management, backup and business continuity) against BDDK (banking regulator) information-systems rules and KVKK (data-protection law).
- Authored a 26-page benchmark audit of the mobile banking apps of 10 leading Turkish banks across five areas (store ratings and releases, onboarding, login security, customer acquisition, money transfers).

Outlier · AI Trainer (Coding) · Freelance · *Remote* *Dec 2024 – Jun 2026*

- Wrote coding prompts and reference solutions (Python, C/C++, JavaScript/TypeScript); rated LLM responses (RLHF).

Arçelik · Software Intern · *Bolu* *Aug – Sep 2023*

- Built a full-stack web app (React, Node.js/Express, PostgreSQL) to replace Excel-based tracking of factory test data.

Ministry of Youth and Sports of Türkiye · Network & Hardware Intern · *Ankara* *Jul 2023*

- Installed and configured Cisco routers and switches; tested and troubleshot the network with Wireshark.

Education

Istanbul Technical University · B.S. in Computer Engineering (100% English) · *Istanbul* *Jul 2026*

Kale Foundation (KSV) scholarship holder throughout the degree

Anadolu University · B.S. in Business Administration (Honors) · *Eskişehir* *May 2025*

George Mason University · Summer English Program · *Virginia, USA* *Summer 2019*

Course Projects

LLM code/test generation on HumanEval-X (llama.cpp, JUnit, JaCoCo, PITest) · local RAG assistant (Ollama, ChromaDB, Streamlit) · concurrent crawler with live search (Python stdlib, SQLite) · trade-data ETL/analytics (Flask, MySQL)

Skills

Programming: Python, Swift, Kotlin, TypeScript/JavaScript, SQL · also Java, C/C++
Backend & Data: FastAPI, Flask, Node.js/Express, PostgreSQL, MongoDB, MySQL, Redis, Meilisearch, ETL, pytest
Mobile & Web: SwiftUI, UIKit, StoreKit, Jetpack Compose, Google Play Billing, ML Kit, Next.js, React, D3.js, Playwright
Infrastructure: Linux, Docker, Nginx, CI/CD, Cloudflare, systemd
AI & LLMs: LLM integration/evaluation, prompt engineering, RAG (ChromaDB), Ollama, llama.cpp, RLHF
Languages: Turkish (native) · English (full professional proficiency; B.S. taught 100% in English)

Activities

ITU ACM Student Chapter, Events Team Member (2023–2026) · ITU Genç TEMA, Member (2021–2026)
Events: Audit & Advisory Fest (2025) · Start Camp, Özyeğin (2020) · ITU summits (2018–2020) · Leadership Summit, Boğaziçi (2017)
Work & Travel USA: retail in New Jersey (2021) and delivery in New York City (2022)