OGUZ KIRMIZI

Software Engineer · CS & AI @ Minerva University

oguz.kirmizi@uni.minerva.edu · +1 415-872-2096 · github.com/thehephaistos · linkedin.com/in/oğuz-kirmizi-323185222 · medium.com/@oguzkirmizi

EDUCATION

Minerva University — B.S. Computational & Natural Sciences 2025 – 2029 · San Francisco

- Concentrations: Computer Science & Artificial Intelligence; Matter & Energy. Global rotation across seven cities.
- Programming Peer Tutor for CS110 (data structures); mathematical researcher on fluid dynamics and the Navier–Stokes equations.

EXPERIENCE

DriftGuard — Co-Founder & CTO 01/2026 – Present

- Built a SaaS platform detecting behavioral change and risk across customer accounts; designed backend infrastructure, data pipelines, account-level baselines, automated alerts, and secure integrations.
- Launched with first paying customer; ran pilot programs measuring retention, operational efficiency, and revenue protection.

Siemens Mendix — Software Engineer Intern & Business Data Researcher 03/2025 – 10/2025

- Contributed as a developer to 4 application development processes in Java, SQL, HTML/CSS on the Mendix low-code platform.
- Built new server checks and tightened control-step metrics; evaluated project feasibility and authored regional business plans.

Marmara University — Research Intern 02/2021 – 07/2025

- Applied positron annihilation lifetime spectroscopy (PALS) to quantify free volume in PEO-grafted-PMMA copolymers, guiding polymer Li-ion electrolyte design; prepared samples and controlled experiments for neutron collision studies.

The Knowledge Society (TKS) — Innovator / Activator 09/2023 – 06/2025

- Collaborated with teams at Google, Microsoft, OpenAI, Verizon, and WEF on AI, edge computing, and economic modeling projects.
- Designed and executed Turkey's first solar sail experiment ($20K funding); published space-tech articles reaching 1,000+ readers; mentored 100+ students.

FIRST Robotics Competition — Team Captain / Youth Mentor 08/2022 – 05/2025

- Led software and mechanical teams to 5th place worldwide out of 10,000+ teams at the FRC World Championship.
- Developed robot automation, image-processing pipelines, PID feedback control; designed CAN cabling and data-collection systems.

PROJECTS

AI Content Detector & Cognitive Firewall — Chrome extension 08/2025 – Present

- Privacy-first hybrid detector for AI-generated images and text (local TensorFlow.js + cloud Gemini); real-time scanning via Web Workers, OffscreenCanvas, and zero-copy transferables; ported Python detection heuristics to client-side JS.

"Let's Go" Tourism AI App 07–09/2025

- Head software developer (Flutter/Dart/Swift); cut reservation time waste 30%; mentored by two 5M+ company CEOs.

Aerolyx CO_2 Capture & Energy 2023 – 2024

- Aluminum-anode CO_2 capture generating O_2 + power; 2024 RISE Global Challenge Finalist (84,000 applicants).

PUBLICATIONS

- "Energy Transmission with Tesla Coil in Outer Space," *IJHSR* Vol. 6 Issue 2 (2024) — orbital dynamics, power budgets, and resonance efficiency for CO_2-free orbit-to-surface wireless power. doi.org/10.36838/v6i2.2

SKILLS

Languages: Python (OpenCV, security analysis), Java (backend, OOD), C/C++ (real-time robotics), Kotlin/Flutter/Dart, SQL, HTML/CSS, JavaScript/TypeScript, MATLAB

Systems: Control systems & embedded electronics (PID, CAN), computer vision, data pipelines, low-code (Mendix), TensorFlow.js, backend services