KAAN ALDEMİR
COMPUTER ENGINEER

✉ kaanaldemir1608@gmail.com
🌐 kaanaldemir.com

in linkedin.com/in/kaan-aldemir
📞 +90 534 780 6600

github.com/kaanaldemir
📍 Küçükçekmece/İstanbul

EDUCATION

Namık Kemal University
Computer Engineering
2016 - 2021

SKILLS

- **Systems & Networking:**
  Headless Linux, OpenWRT, Raspberry Pi, Headscale/Tailscale (mesh, exit node), Cloudflare Zero Tunnel/Zero Trust, Nginx, OIDC

- **Web & Nginx:**
  PHP forms/admin panels, message handling, password-protected tools

- **Python:**
  PyQt/Tkinter GUIs, OpenCV, image pre/post-processing, training/evaluation loops, heatmap/visualization

- **Android:**
  UI, basic Jetpack, networking, packaging & release

- **Tooling & Practices:**
  Git/GitHub, clear READMEs, lightweight CI habits

LANGUAGES

English — *C1 level*
Turkish — *Native*

OBJECTIVE

I'm a software/R&D engineer focused on self-hosting and networking. I ship Android apps and Python GUIs, then make them reachable and safe on real hardware. OpenWRT, headscale/Tailscale, Cloudflare Zero Trust, OIDC, and Nginx are my everyday tools. Recent work includes a no-CLI fundus toolkit with heatmap explainability, a DLSS config GUI, and this router-hosted site with a small admin panel. I prefer small, fast builds, clear READMEs, and one-command setup scripts that turn prototypes into reliable services.

WORK EXPERIENCE

HOMETECH R&D DEPARTMENT - COMPUTER ENGINEER

Küçükçekmece/İstanbul - June 2024/Present

- Fundus eye disease detection: Took the project from prototype to a working model, curated/cleaned the dataset, trained/evaluated models, and packaged an inference tool teammates can run without GPU expertise.
- No-CLI training & inference GUI: Built a desktop app with parameter selection + tooltips, one-click training, and a separate Inference tab for model selection and predictions with heatmap overlays for interpretability.
- Coordinated training mesh: Deployed a headscale (self-hosted Tailscale) mesh so lab/edge devices can join coordinated training.
- Android: Developed Android applications for the Fundus Eye Disease Detection and National Roaming projects.

MEGAPRINT - DOCUMENT TRANSLATOR

Esenyurt/İstanbul - November 2023/February 2024

- Translated machine user manuals from English to Turkish, ensuring accuracy and technical clarity.

PROJECTS

- Fundus Disease Toolkit (GUI + Inference): Train retinal-disease models without CLI; parameter tooltips, one-click runs, Inference tab with heatmap overlays.
- Private Mesh for ML Jobs (Headscale + Scripts): Headscale private network + SSH/Python scripts to enroll nodes, launch jobs, stream logs.
- Personal Network Mesh (Headscale and Google Compute): Headscale runs on my VPS with OIDC login; gives all my devices a private mesh, punches through CGNAT, and lets the router act as an exit node.
- Self-Hosted Personal Website: Static site on OpenWRT with VPS reverse proxy (CGNAT). Includes internal message panel and inline content editor.
- Personal Cloud & Media (Raspberry Pi): Self-hosted Filebrowser Quantum Cloud + Jellyfin Media Server on a Pi
- DLSS Override for All Games: GUI tool to enable DLSS overrides by editing NVIDIA config; backups and read-only safeguards included.
- Custom Image Processing Tool: Custom contrast stretching from user defined values