Yaman Yucel
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Professional Summary

Currently, Full Stack Developer, architecting and designing end to end banking software systems. Previously, AI/ML Engineer (M.Sc. UCLA, B.Sc. Bilkent) specializing in multimodal deep-learning systems, knowledge-graph extraction, and production-grade CV/NLP pipelines.

Education

- **University of California, Los Angeles** — Los Angeles, USA
  Master of Science - Electrical and Computer Engineering, GPA:3.97 — *September 2022 - June 2024*
- **Bilkent University** — Ankara, Turkey
  Bachelor of Science - Electrical and Electronics Engineering, GPA:3.78 — *September 2017 - June 2021*

Skills Summary

- **Programming Languages**: Rust, Python, C/C++, R, MATLAB, VHDL, SQL, HTML, CSS, Typescript, K8s
- **Languages**: Turkish(native), English(IELTS 7.5 - C1), German(B1)

Experience

- **Cybersoft** — Ankara, Turkey
  AI/ML Lead - Full Stack Dev — *February 2025 – Present*
  - **Enterprise Decision Engine and MLOps Platform — Technical Lead (team of 3)**: Led 2 engineers building a multi-tenant business rules platform in Rust/Axum (SQLx, PostgreSQL, OpenAPI) around the embedded Zen rules engine, extending the Zen/JDM decision language with a custom-node registry, including sandboxed Python nodes backed by uv-managed environments and an ML-inference node, plus immutable rule versioning, dependency-tree deployment packaging to S3, approval workflows, and RBAC with audit. Architected and rewrote the collaborative decision-graph editor as a standalone TypeScript monorepo (format / CRDT / editor / fixtures packages) with a host contract and plugin API, Yjs-based real-time multi-user editing against a yrs-on-Axum server, enforced by custom architectural lint rules and a Playwright suite covering two-browser collaboration, accessibility and performance. Built an MLflow + KServe model-serving path on Kubernetes in which promoting a model writes an InferenceService manifest to the GitOps repo via the GitHub API for FluxCD to reconcile, letting business rules invoke production ML models, alongside the full React 19/TypeScript authoring workbench and an agentic Pydantic AI assistant with human-in-the-loop tool approval.
  - **Şekerbank Cheque Intelligence Project**: Developed an end-to-end cheque intelligence pipeline, including data version control and training YOLO-based cheque detection models and building the supporting Rust backend and mobile application for cheque processing and analysis.
  - **Knowledge Graph Automation**: Developed an end-to-end pipeline that converts unstructured enterprise documents into a searchable knowledge graph
  - **OCR + RAG pipeline**: Built a VLM based OCR RAG pipeline for accurate document verification and information extraction.

- **Teknopar Endüstriyel Otomasyon** — Ankara, Turkey
  Artificial Intelligence Engineer — *July 2024 – February 2025*
  - **Intelligent CNC Diagnostics**: Built and deployed a transformer-based classifier for CNC machine messages for inner tool purposes.
  - **Table Understanding & RAG**: Implemented a RAG pipeline with Table Transformer that extracts and answers questions over complex tabular PDFs, enabling instant reporting and querying over the tables using natural language.
  - **Computer Vision for QA**: Developed surface-defect detection and instance-segmentation models for object counting and measurement purposes.

- **UCLA** — Los Angeles, USA
  Voluntary Work - UCLA Speech Processing and Auditory Perception Lab (Part-time) — *March 2024 - June 2024*
  - **Speech Processing**: Child Automatic Speech Recognition
- **ASELSAN** — Ankara, Turkey
  System Engineer - Algorithm Developer (Full-time) — *September 2021 - June 2022*
  - **System Algorithm Design**: Tracking and statistical solver algorithms
- **ASELSAN** — Ankara,Turkey
  Signal Processing and Telecommunications Internship (Full-time) — *June 2020 - August 2020*
  - **Project**: Creating a single channel end-to-end software-defined radio with FPGA environment
- **ESEN** — Ankara,Turkey
  Digital Design Internship (Full-time) — *June 2019 - August 2019*
  - **Project**: Interface design for KC705 FPGA Board

Projects

- **UCLA Coursework Projects**: Machine learning, computer vision, computational neuroscience, and data mining projects available at GitHub.
- **Statistical Learning and Data Analytics**: Implemented decision trees, regularized logistic regression, and fully connected neural networks from scratch without ML/DL libraries.
- **Haxby Dataset Analysis**: Applied multidimensional scaling and compared and validated multiple classification models on the Haxby neuroimaging dataset.

Relevant Coursework

- **UCLA**: Neural Networks and Deep Learning; Large-Scale Data Mining; Computer Vision; Large-Scale Networks; Computational Imaging; Digital Speech Processing; Statistical Machine Learning.
- **Bilkent University**: Introduction to Machine Learning (A+, ranked first); Linear Algebra for Data Analysis and Machine Learning; Statistical Learning and Data Analysis.