

EMRE ILHAN SENEL

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Experience

Researcher – Deep Learning & Greenwashing Detection

Feb. 2026 – Present

TUBITAK / Gebze Technical University

Gebze, Turkiye

- Designing multi-modal deep learning models (NLP + computer vision) to detect greenwashing signals in Turkey's integrated environmental reports for a nationally funded research project, supervised by the Dean of Engineering.

Sustainable Finance Team Assistant

Oct. 2024 – Dec. 2024

Akbank

Istanbul, Turkiye

- Selected as one of 30 from thousands of applicants to the Akbank Sustainable Finance Academy; earned placement after our 6-person team won the case study competition at Sabanci Center.
- Conducted MRIO analyses using EXIOBASE/pymrio to map emission flows across 6 industrial value chains (cement, steel, energy, real estate, automotive, aluminum). Independently initiated a project on ESG reporting automation and sustainability compliance detection, later evolving into Grendex.

Business Development Manager

Jan. 2022 – Nov. 2023

The Golden Horn

New York, United States

- Drove over \$100K in revenue through strategic client acquisition and cross-border sales operations between Istanbul and New York offices over nearly 2 years.

Software Development Intern

Jul. 2023 – Aug. 2023

Agenda BST

Istanbul, Turkiye

- Developed Java backend modules for an agent-based simulation framework used by enterprise clients, contributing to core simulation logic, database layer optimization, and API development within Agile sprint cycles.

Projects

Virgola | Map-based social platform for real-time spontaneous events

2026

- Building a location-aware social app with live map event discovery and real-time meetup coordination. React Native, Node.js/Express, PostgreSQL. Concept to MVP in 2 weeks; launching Q2 2026.

Grendex | AI-driven corporate sustainability reporting automation

2025

- Building Turkey's first AI-native ESG compliance platform for TSRS, CBAM, and CDP reporting; combining AI document analysis with a localized carbon calculation engine for 400+ Turkish companies with no local software alternative. FastAPI/Python, Next.js, PostgreSQL (pgVector), LangChain, IBM Docling. Collaborating with GTU Sustainability Office and Environmental Engineering.

Stoknet | AI-powered financial OS for Turkish SMEs

2025

- Built a multi-tenant financial management platform: 180+ API endpoints, 35 database models, ~40K lines of code. GIB-integrated e-invoicing, SMMM accountant bridge, marketplace reconciliation engine, OCR-based invoice processing. React (Vite), Node.js/Express, PostgreSQL (Prisma).

PitchUp | Data-driven investor deal-flow pre-screening tool

2024

- Built MVP of a vertical-feed pitching platform with mandatory metrics overlay and investor negative-filtering. Flutter, Firebase.

Leadership & Community

Research Volunteer | T3 AI – Turkish National LLM Initiative

Apr. – Oct. 2024

- Contributed to Turkey's native LLM development through data curation and dataset quality assessment (7 months).

Vice President | GTU Computer Community

2021 – 2022

- Led Geekday tech conference (500+ attendees), managed sponsorships and a 15-member team for workshops and hackathons.

Supervisory Board | GTU GIKAP (Entrepreneurship & Career Planning)

2023

- Revitalized the society through career workshops, podcasts, and startup ecosystem programs.

Education

Gebze Technical University

Gebze, Kocaeli

B.Sc. in Computer Engineering

Sep. 2021 – Jun. 2027 (Expected)

Technical Skills

Languages: Dart, TypeScript, JavaScript, Python, Java, C/C++, SQL

Frontend: React, Next.js, React Native, HTML5, CSS3, Tailwind CSS

Backend: Node.js (Express.js), FastAPI, RESTful APIs, JWT Auth, Firebase Cloud Functions

Mobile: Flutter (Riverpod, GoRouter), React Native

Databases: PostgreSQL, MySQL, Firebase Firestore

Data & ML: Python (Pandas, NumPy, Scikit-learn), NLP, Deep Learning, Computer Vision, LangChain

Tools: Git/GitHub, Docker, Agile/Scrum, Prisma, VS Code

Spoken: Turkish (Native), English (C2 Professional Proficiency)