# EGE DEMIR

Istanbul, Turkey

demegire@gmail.com ⋄ [demegire.github.io](demegire.github.io) ⋄ +905326587242

## EDUCATION

**Middle East Technical University, Ankara**                                    *2019 - 2023*

Bachelor of Industrial Engineering with a focus on Operations Research

Department of Industrial Engineering                                    cGPA: 3.52/4.00

Developed an [advertising strategy algorithm](#) that reaches target audience exposure in order to maximize LTV for mobile apps using the minimum budget across ad marketplaces with bidding mechanisms using optimal control theory

Ranked in the top 0.0012 percent in the university entrance exam

## EXPERIENCE

**The Twin AI (Alias)**                                    Nashville, USA

*Founding Machine Learning Engineer (40 hrs/week, remote)*                    *April 2024 - July 2025*

· Built the ML components of a **generative AI video platform** from ground up
· Worked on finetuning AI video models such as WAN; cloning voices, lipsync, text2image, text2video, image2video, prompt enhancement
· Created a scalable ML API which serves **thousands of requests a day**
· Before the pivot, was previously in charge of LLM efforts, which promised to boost in-app sales through AI assistants and curated conversational persuasion and sales datasets on public and proprietary data
· Used Python, PyTorch, vLLM, Huggingface, Modal, Fal

**MyPeachAI**                                    Seattle, USA

*Founding Machine Learning Engineer (40 hrs/week, remote)*                    *Oct 2023 - March 2024*

· **Led the machine learning team** at a pre-seed AI companion/chatbot startup
· Created a **scalable** generative AI system which served 100's of customers concurrently
· Aligned LLM's to ensure engaging and ethical conversations with AI companions, which **drove up engagement more than 50%** and was **featured in** [the Guardian](#)
· **Finetuned generative models** on humans models' text, image and voice data who consentfully participated in the platform, which achieved a very high degree of resemblance
· Built internal tools to analyze user data, which **shifted the product pricing strategy**
· Used Python, PyTorch, AWQ, vLLM, ComfyUI, Huggingface, Anyscale, Google Cloud

**Bueno**                                    Los Angeles, USA

*Machine Learning Engineer (20 hrs/week, remote)*                    *Sep 2021 - May 2023*

· Developed tools to aid artists in a generative art startup as the sole ML engineer, such as a model to extend the artists' artwork using their style by **finetuning Stable Diffusion**
· Developed the **frontend, backend, ML and cloud components** for these tools using Python, PyTorch, React, Typescript and AWS Sagemaker

**Summarify**                                    Istanbul, Turkey

*Natural Language Processing Research Engineer (20 hrs/week, remote)*                    *Dec 2020 - Sep 2021*

· Developed **state of the art Turkish NLP models** for social media analysis.
· Created the best Turkish summarization algorithm to date by curating a novel dataset and finetuning mT5, which also **scored better than humans by ROUGE score**

## VOLUNTARY WORK

**Middle East Technical University Artificial Intelligence Society**  ·  Ankara, Turkey
*Co-founder*  ·  *2020-2023*

· Cofounded ODTU YZT, a **college society to work on projects such as reproducing papers** and learn together by following courses, reading books and papers
· Worked on projects such as a Python timeseries library inspired by Huggingface's libraries, a text clustering model to improve the user experience for a popular Turkish social media website eksisozluk.com, and the reproduction of the Attention is All You Need paper
· **Designed an introduction to AI course** and lectured to **100's of students** over eight weeks

**CodeFest**  ·  Istanbul, Turkey
*Co-founder*  ·  *2016-2019*

· Cofounded CodeFest, **the first highschool level USACO-style coding competition** in Turkey with 300+ annual attendees, managed a budget of 6,000+ USD and a body of 40 students

## SKILLS AND INTERESTS

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|---|---|
| **Tools** | Python, C++, Pytorch, AWS, MySQL, Typescript |
| **Languages** | Native Turkish, C2 English, B1 German |
| **Interests** | Deep Learning, Generative AI, Operations Research |

## ACHIEVEMENTS

**First place** in Vakavt 2022, **the most prestigious national business case solving competition in Turkey** with over 100 participating teams.

Second place in EnGenius '20 , a data science competition organized by Eczacibasi Ilac where competitors forecasted drug sales and pitched their method

First place in Turkey in the international Engineering Aptitude, Mathematics and Science Competition organized by Technology Student Association in 2017 and 2018. Participated in the finals in USA.

## ADDITIONAL COURSES

CENG501 - **Deep Learning**, reproduced "Beyond Fully Connected Layers with Quaternions: Parametrization of Hypercomplex Multiplications with 1/n Parameters", ICLR 2021 AA, Middle East Technical University

CENG796 - **Deep Generative Models**, reproduced "Drop the GAN: In Defense of Patches Nearest Neighbors as Single Image Generative Models", CVPR 2022, AA, Middle East Technical University

**Introduction to Artificial Intelligence**, 1 year hands on program by Dr. Uzay Cetin in KaVe

**Machine Learning**, Stanford University (Coursera)