EXPERIENCE

Retorio GmbH, Munich— *AI Engineer*

March 2022 - PRESENT

Developing LLM chains and prompts to achieve very complex tasks.
Developing GRPC/HTTP backends for the product.
Supporting the development of new CV and NLP models and training them using the GCP platform.
Working with GCF & GCR deployments.

Tazi.ai, Istanbul— *ML Engineer - Internship*

July 2020 - September 2020

Worked on Variational Autoencoders to develop a feature selection method using Scala.

SUTAS Sut Urunleri A.Ş, Istanbul— *SWE - Internship*

June 2019 - August 2019

Worked on a native Android Development project comprising Design, App and backend, and database Implementation.

PROJECTS

Towards Smarter and Context-Aware Retrieval Augmented Generation with LLMs — *Master's Thesis*

- Developed a robust query taxonomy to address key challenges in RAG, including feature extraction, disambiguation, and reducing hallucinations.
- Conducted experiments on explicit vs. implicit feature extraction, improving accuracy in LLM query handling.
- Created and analyzed AbbrvQA, an AI-generated ambiguity dataset, and enhanced domain-specific abbreviation disambiguation with a filtered MedQuAD dataset.
- Proposed a smarter RAG pipeline integrating feature extraction, query disambiguation, and validation modules.

Investigating Bias and Discrimination in Movies Using Deep Learning — *Bachelor Thesis*

Conducted research on movies, mostly Hollywood, using a very wide dataset called MovieNet[1] using computer vision techniques with advisors Pinar Yanardag[2] and Suzan Uskudarli[3]. Consists of implementing and re-using Deep Learning architectures, pre-trained models, and analysis tools in Python.

- https://www.cmpe.boun.edu.tr/content/investigating-bias-and-discrimination-movies-using-deep-learning

Ömür, Burak

An experienced student, Statistics & AI Enthusiast

21, Josef-Wirth-Weg Str.
Munich, DE 80992
(+49) 178-205-7824
burak.omur.1998@gmail.com

SKILLS

Python:
Pytorch, Tensorflow, Flax, Numpy, Jax, Scipy, Sklearn, Matplotlib, Langchain, Pydantic, FastAPI, Flask,
Database:
MongoDB, MySQL, MSSQL
Other:
Google Cloud Platform, Azure, Docker, C++, Java, MatLab

EDUCATION

School Name, Munich— *M.Sc.*

October 2021 - June 2024
Informatics - GPA: 1.61

Bogazici University, Istanbul— *B.Sc.*

September 2016 - June 2021
Computer Engineering - GPA: 3.75/4

LANGUAGES

- English (Fluent)
- German (A2)
- Turkish (Native)

---

[1] https://movienet.site/
[2] https://pinguar.org/
[3] https://www.cmpe.boun.edu.tr/tr/people/suzan.uskudarli