# Ömer Kaan Gürbüz

omerkaan01@gmail.com okg21.github.io

## **→** +90-5533461120 GitHub Profile in LinkedIn Profile

## **EDUCATION**

2023-Present •Bilkent University

Computer Science Masters

- Courses: Deep Learning, Learning for Robotics, Data Science for Software Engineering, Computational Geometry, Data Privacy, Automated Program Repair
- Teaching Assistant: Algorithms and Programming I, Computers and Data Organization
- Contributor to projects: Newt and sbgnviz.js

•TOBB ETU 2019-2023

Computer Science Bachelors

- Electives: Data Mining, Natural Language Processing, Machine Learning, Deep Learning, Computer Vision, Cryptography

#### EXPERIENCE

 Netcad Sep 2022-Dec 2022

 $\begin{array}{c} \textit{Machine Learning Intern} \\ -\text{Worked on research and development of Graph Neural Networks for point cloud part} \end{array}$ Ankara, Turkey

segmentation problem.

- Implemented custom Graph Neural Networks using PyG (PyTorch Geometric).

•Turkcell Jan 2022-May 2022

Machine Learning Intern

Worked on facial recognition, age estimation and gender estimation

- Implemented CNNs with Tensorflow

•HAVELSAN May 2021-Sep 2021

Computer Engineering Intern

Worked on development of a twin-turbine helicopter simulation

# PERSONAL PROJECTS

### -Image Deformation As a Data Augmentation Method

Jul 2022

Istanbul, Turkey

Ankara, Turkey

GPA: 3.05

Implementation of the paper with the same name

- \* Tools & technologies used: Python, Tensorflow
- \* Github Link

## -Turkish Poetry Generation Using Transformers

Aug 2022

Development of a transformer based model

- \* Tools & technologies used: Python, PyTorch
- \* Implemented with PyTorch from scratch
- \* Github Link

#### Research Experience

### -Watermarking Language Models

Feb 2023-Nov 2023

Researching watermarking algorithms for Large Language Models to detect machine-generated text

- \* Tools & technologies used: Python, PyTorch, HuggingFace Transformers
- \* See the full paper here.

## TECHNICAL SKILLS AND INTERESTS

**Developer Tools:**C(Proficient), Python(Advanced), Java(Proficient), SQL(Proficient)

Packages: PyTorch, Tensorflow, HuggingFace Transformers, Scikit-learn, Numpy, SciPy, Pandas, NLTK, Matplotlib Areas of Interest: Natural Language Processing, Large Language Models, Machine Learning, Data Science, Ethical AI

## LANGUAGES

English: IETLS 7.5, e-YÖKDİL 90 Turkish: Native proficiency **German**: Beginner proficiency

#### Contests

- -SİU2023-NST: Hate Speech Detection: 1st place in two categories
- -Teknofest T3 AI Hackathon: Finalist and 4th place in LLM Finetuning over 327 teams.