# Karahan Sarıtaş

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#### EDUCATION

University of Tübingen

Tübingen, Germany

M.Sc. in Machine Learning - GPA: 1.17/1.00

 $Oct\ 2023-Jul\ 2025$ 

Boğaziçi University

İstanbul, Turkey

B.Sc. in Computer Engineering - GPA: 3.88/4.00

Sep 2018 - Jul 2023

Ranked 3 out of 91 - High Honors

Bachelor's Project: A Comprehensive Analysis of Static Word Embeddings for Turkish\*

İstanbul, Turkey

Haydarpaşa Anatolia High School High School Diploma - GPA: 98/100

Sep 2014 - Jun 2018

TEACHING/RESEARCH EXPERIENCE

## University of Tübingen

Tübingen, Germany

Teaching Assistant

May 2024 - Aug 2024

• Served as a practice group leader for the course "Introduction to Machine Learning" (Summer 2024). Supervised an exercise group and evaluated student submissions weekly

Tübitak İstanbul, Turkey

 $T\ddot{u}bitak\ Star\ Research\ Intern$ 

 $Jun\ 2023-Jul\ 2023$ 

• Worked as a Tübitak undergraduate research intern on the "Automatic Transcription of Ottoman Turkish Documents using DL Technologies" project (AKİS). Enhanced the training effectiveness of the transcription algorithm by employing Dynamic Time Warping and Levenshtein distance to align OCR-generated lines with the ground truth data.

## Boğaziçi University

İstanbul, Turkey

Undergraduate Teaching Assistant

Mar 2021 - Jun 2023

 $\bullet\,$  Spring 2023 - Fundamentals of Software Engineering

Spring 2022 - Introduction to Object Oriented Programming

Fall 2021 - Introduction to Computing

Spring 2021 - Introduction to Computing

• Engaged in a diverse array of responsibilities, including project preparation, formulating weekly lab questions, evaluating student submissions, maintaining communication with students, and producing educational videos

VIP Fen Bilimleri

Teaching Assistant

İstanbul, Turkey

Sep 2018 – Feb 2020

• Engaged in problem-solving sessions to help students in their preparation for the university entrance exam

## Industry Experience

Trendyol

İstanbul, Turkey

 $Associate\ Developer$ 

Jul 2022 - Dec 2022

- Developed and maintained batch data pipelines using **Apache Spark**, **Scala**, and **Alibaba Cloud EMR Service**. Worked on integrating different monitoring tools including Datadog, Grafana, New Relic, and Alibaba Cloud Monitoring with various products. Improved documentation by integrating Swagger and preparing data pipeline diagrams
- Technology Stack: Scala, Spark, Alibaba Cloud, Terraform, Kubernetes, Kafka, Zeppelin, Hadoop, Hive, Akka HTTP

RDC+

İstanbul, Turkey

Data Science Intern

Aug 2021 - Oct 2021

- Developed and utilized **Selenium** and **BeautifulSoup** within **Python** to automate web scraping processes for collecting user data, including posts and related information. Employed **Neo4j** to construct graphical representations of the gathered data, facilitating comprehensive analysis and visualization of user interactions and content dynamics
- Learned about multiclass sentiment analysis, working on the product reviews using Turkish NLP (Zemberek) tools
- Technology Stack: Python, Neo4j, BeautifulSoup, Selenium

\*Sarıtaş, Karahan and Oz, Cahid Arda and Güngör, Tunga, "A Comprehensive Analysis of Static Word Embeddings for Turkish". In: Expert Systems With Applications, 2024 [Paper] [arXiv] [Code]

## SCHOLARSHIPS & ACHIEVEMENTS

Haydarpaşa Anatolia High School Salutatorian Award: Graduated as the second-highest ranked student in my class

Boğaziçi University Computer Engineering Third Ranking Award: Graduated as the third-highest ranked student in my class

National University Admission Exam (YKS): Ranked  $143^{rd}$  in Mathematics and Science among ca. 2 million candidates

National University Admission Exam (Foreign Language): Ranked 99<sup>th</sup> in Foreign Language (English) among ca. 2 million candidates

**KYK Top 100 Government Scholarship:** Awarded to undergraduate students who have been ranked in the top 100 on National University Admission Exam by Higher Education Credit and Hostels Institution (KYK)

Trendyol & TOG Education Scholarship: Awarded to top 50 undergraduate students based on university entrance ranking and academic achievement in the university

Tübitak 2247-C Intern Researcher Scholarship: Awarded to undergraduate students who take part in research projects carried out by the Scientific and Technological Research Council of Turkey (TUBITAK)

**TEV-DAAD Scholarship:** Selected for the Joint Scholarship offered by the German Academic Exchange Service (DAAD) and the Turkish Education Foundation (TEV) for pursuing my master's studies in Germany

Bending Spoons Transcend 2022: Selected to be one of the 5 students from Turkey and 25 students from Europe to receive exclusive, one-on-one mentorship from a senior engineer at Bending Spoons

#### LANGUAGES

Turkish: Native language

English: Advanced (IELTS 8.0 in 2022)

German: Elementary (did deutsch-institut zertifikat in 2023)

## SKILLS

Languages: Python, Java, Scala, C++, SQL

Tools: IATFX, Git, MySQL, SQLite, VS Code, Eclipse, Jupyter, Google Colab, IntelliJ, Alibaba E-MapReduce Service

Frameworks & Libraries: TensorFlow, PyTorch, Django, Django REST Framework, Flask, NumPy, Spark

### CERTIFICATES & PARTICIPATIONS

inzva İstanbul, Turkey

Participant

- Algorithm Program 2020-2021
- Algorithm Competition Winter Camp 2022
- Algorithm Program Spring 2022
- Google Developers & inzva Machine Learning Bootcamp Turkey
- Applied AI Study Group #7

### MOOCs & Professional Certificates

DeepLearning.AI

- Machine Learning
- Deep Learning Specialization
- DeepLearning.AI Tensorflow Developer Specialization
- TensorFlow Professional Developer Certificate