

İlknur Akçay

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EDUCATIONS

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| Istanbul Medipol University <i>B.S. Computer Engineering, 100% English</i> | 2017-2022 GPA: 3.19/4.0 |
| Istanbul Medipol University <i>B.S. Biomedical Engineering, 100% English, Full Scholarship</i> | 2019-2023 GPA: 3.22/4.0 |

SKILLS

Languages: Python, Spark, SQL, MATLAB, C/C++
Libraries: Tensorflow, Matplotlib, Numpy, Scikit-learn

EXPERIENCE

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| AI Research Engineer <i>Huawei</i> Click-Through Rate (CTR) and Conversion Rate (CVR) prediction for company ads. The project aim is increase to these ratios using deep learning techniques different regions and targeting millions of users. -Data visualization and analysis on large datasets, -Working with ML frameworks like Tensorflow, -Researching of feature importance methods, -Monitoring and analysis of model performance, -Reporting on performance evaluations and designing dashboards, -Researching new methods for data analysis (Synthetic Data Generation), -Researching on dimensionality reduction methods (tSNE, UMAP, PCA), -Deploying and adjusting traffic of online ML models in a live environment | 04/2023 – Present |
| Instructor(Python) <i>Logiscool</i> Delivered introductory and intermediate-level Python lessons to children, focusing on the fundamental principles of coding. | 09/2022 - 03/2023 |
| Instructor(Coding and Robotics) <i>T3 Vakfı</i> Conducted practical training sessions in robotics and programming, equipping children with essential technological and coding skills. | 09/2022 - 12/2022 |
| Project Intern <i>Istanbul Medipol Universitesi Hastanesi</i> Reconstruction, processing, and segmentation of cardiac MR images were performed using Python libraries. | 08/2022 - 09/2022 |
| Researcher Intern Teknolojileri <i>Argenit Akıllı Bilişim</i> TUBITAK 2247-C Intern Researcher Scholarship Program - Microscope image analysis was conducted, and algorithms were optimized in Python using libraries such as PyTorch and TensorFlow. | 02/2022 - 09/2022 |
| Information Technology Intern <i>Sanayi ve Teknoloji Bakanlığı</i> A desktop application was developed using C# and MySQL for solving transportation problems for employees | 09/2021 - 10/2021 |
| Machine Learning Intern <i>Obase Bilgisayar ve Danışmanlık Hizmetleri</i> Preprocessing were performed for a handwritten text recognition project in summer internship | 08/2021 - 09/2021 |
| Software Engineer Intern <i>Deka Technology</i> The fundamentals of the Java language were reviewed, and a desktop application was developed using JSON | 08/2019 - 10/2019 |
| Instructor(Coding) <i>T3 Vakfı-Bilim Üsküdar</i> The fundamental principles of coding were introduced to children through simplified programming applications. | 06/2019 - 07/2019 |

VOLUNTEER

Executive Board Member | *Google Developer Student Club Medipol*

09/2020 - 09/2022

Events were organized to bring university students together with experts in the field to discuss innovation, technology, and coding.

Volunteer | *T3 Vakfı-Teknofest*

09/2019 - 09/2019

Juries who evaluated Teknofest projects were supported, and students were coordinated.

PROJECTS

Segmentation of the soma on the bright field microscopy images | *Python, MATLAB, Unix Shell*

2021-2022

-Analyzed and segmented the neuron soma from unlabeled bright field microscopy images using detection and segmentation algorithms.

-This project was accepted by Tübitak-2209.

Hand Gesture Based Device Control | *Python, Nvidia Jetson, OpenCV*

2022-2023

-Hand authentication and hand gesture-based device control in the medical domain.

- A side project with similar content was adapted from Nvidia Jetson

PUBLICATIONS

Preprint-Effects of Using Synthetic Data on Deep Recommender Models' Performance | June 2024

Researched strategies to tackle data imbalance in recommender systems using synthetic data generation techniques.

Evaluated 6 different methods for augmenting datasets with synthetic negative samples, showing consistent improvements in AUC scores and emphasizing the potential of data augmentation to enhance recommendation performance.

<https://arxiv.org/abs/2406.18286>

INTEREST

Machine learning, Data Science, Deep learning, Artificial intelligence, Image processing, Medical imaging, Photography