

EDUCATION

- **Sabanci University** Istanbul, Turkey
MSc in Data Science; GPA: 3.54 *Sep 2022 - Current*
Courses: Machine Learning, Pattern Recognition, Deep Learning, Network Science, Big Data Processing
Statistical Modelling, Statistical Inference, Engineering Optimization.
- **Kirklareli University** Kirklareli, Turkey
BS in Software Engineering; GPA: 3.71 *Sep 2018 - Jun 2022*

EXPERIENCE

- **Sabanci University** Istanbul, Turkey
Teaching Assistant *Sep 2022 - Current*
 - **Courses:** Software Engineering, Advanced Programming
 - Held weekly recitation session and office hours.
 - Graded programming homework and examinations.
- **Kirklareli University** Kirklareli, Turkey
Research Intern - Asst. Prof. Edip Serdar GÜNER *Nov 2021 - Jun 2022*
 - Participated in the project that was about the creation and analysis of a Turkish drug reviews dataset from social media.
 - Created a dataset by compiling Turkish drug reviews from social media.
 - Analyzed dataset using text mining methods (Zemberek and VNLN).
 - Sentiment Analysis with Hugging Face models (Turkish BERT etc).
- **Cognitiwe AI** Istanbul, Turkey
Research Intern *May 2021 - Sep 2021*
 - Dealt with feature detectors for images
 - Worked with SIFT (Scale Invariant Feature Transform) method
 - Worked with SURF (Speeded-Up Robust Features) method
 - Worked with ORB (Oriented FAST and Rotated BRIEF) method
- **Mimix AI** Istanbul, Turkey
Research Intern *Dec 2020 - Apr 2021*
 - Worked with face swap methods especially DeepFaceLab components
 - Worked with CNN-based face detection methods (S3FD)
 - Worked with CNN-based face alignment methods (2D-FAN)
 - Worked with CNN-based face segmentation methods (TernausNet)
 - Used autoencoders to learn mappings between faces

PUBLICATIONS

- **SCITUNA: Single-Cell data integration tool using network alignment**, BMC Bioinformatics, 2025.
Aissa Houdjedj, Yacine Marouf, **Mekan Myradov**, Onur Dogan, Burak Onur Erten, Oznur Tastan, Cesim Erten and Hilal Kazan
[PDF] / [Code]

ACADEMIC PROJECTS

- **A Toolbox for ANOVA and Linear Regression (May '25)**
Comprehensive statistical analysis toolkit that implements
 - One-Way ANOVA (group comparison, contrast analysis)
 - Two-Way ANOVA (two-factor analysis with interaction effects)
 - Multiple Linear Regression (parameter estimation, hypothesis testing, prediction intervals)
 - Multiple comparison corrections (Bonferroni, Sidak, Scheffe, Tukey) with individual and simultaneous confidence intervals[PDF] / [Code]
- **Synthetic Data Generation with Gaussian Mixture Models (Sep '23)**
Implemented a synthetic data generation algorithm in Python using Gaussian Mixture Models
[PDF] / [Code]

ACADEMIC ACTIVITIES

- **International Conference on Research in Computational Molecular Biology** Istanbul, Turkey
Participant Apr 16, 2023 - Apr 19, 2023
- **Workshop on the analysis and integration of single-cell RNA-seq datasets** Antalya, Turkey
Instructor Mar 23, 2023

CERTIFICATIONS AND COURSES

- Machine Learning Specialization (Coursera – Andrew Ng).
- Deep Learning Specialization (Coursera – Andrew Ng).

HONORS AND AWARDS

- TUBITAK Research Scholarship, 2022-2025.
- Sabanci University Tuition Waiver Scholarship, 2022-2026.
- Kirlareli University – High Honor Graduate

SKILLS SUMMARY

- **Programming Languages:** Python, R, C, C++, Java, Unix/Shell Scripting
- **Machine Learning & Deep Learning:** PyTorch, TensorFlow, CNNs, RNNs, Transformers, Autoencoders, Gaussian Mixture Models
- **Big Data & Cloud Technologies:** Hadoop, Apache Spark, Snowflake
- **Development Tools & Platforms:** GIT, Linux, Unix
- **Text Processing & NLP Libraries:** Zemberek, VNLp, Hugging Face Transformers
- **Domain Expertise:**
 - Computer Vision (SIFT, SURF, ORB, Face Detection/Alignment/Segmentation)
 - Natural Language Processing (BERT, Sentiment Analysis, Text Mining)
 - Computational Biology & Bioinformatics (Single-cell RNA-seq analysis)

ADDITIONAL INFORMATION

- **Military Service:** Feb 2024 - Feb 2025