

## EDUCATION

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

## EXPERIENCE

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- **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.
  - Helped students so they can follow software development lifecycle best practices.
- **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).
- **Cognitive 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

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- **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

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- **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

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- **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

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

## HONORS AND AWARDS

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

## SKILLS SUMMARY

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- **Software Development Lifecycle:** Agile Methodologies, Coding Standards, Code Reviews, Resource Management, Development Processes, Deployment, Testing and Operations
- **Programming Languages:** Python, R, C, C++, Java, SQL, Unix/Shell Scripting
- **Libraries:** NLTK, OpenCV, NumPy, SciPy, Pandas, Matplotlib, Seaborn
- **Machine Learning & Deep Learning:** Spark MLlib, Scikit-learn, TensorFlow, PyTorch, 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, VNLTP, 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

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