

FURKAN ERIS

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EDUCATION

Sabanci University
BS in Computer Science

Istanbul, Turkey
Sep 2021 - Jun 2025

- Sakip Sabanci Excellence Scholarship, Monthly Financial Aid Scholarship, High Honors
- Ranked **top 0.03%** among 2.5 million students in National University Entrance Exam.

PUBLICATIONS & POSTER PRESENTATIONS

Under Review: He, D., Dazard, J., **Eris F.**, Durmaz, A., Bebek, G. (2024).
Integrative network analysis discovers causal regulatory network of system level measurements

Presented a poster on population dynamics at Microverse Symposium, Jena, Germany. (2023)

Volunteered at RECOMB 2023.

WORK/RESEARCH EXPERIENCE

Helmholtz Munich – Theis Lab
Researcher

Istanbul, Turkey
Feb 2024 - Present

- Advisors: Alessandro Palma & Weixu Wang
- Developing an ODE-based cell fate inference tool considering the cell-specific and external latent time.

Sabanci University
Undergraduate Researcher

Istanbul, Turkey
Nov 2022 - Present

- Advisors: Oznur Tastan & Ogun Adebali
- Developing a general purpose protein language model that would be aware of phylogenetics along with sequence and structure information.
- Implementing an open-source backbone for future PLMs with a linear-time attention mechanism and optional cramming of pretraining down to one day with a single GPU.

Sabanci University - BIO 310 (Introduction to Bioinformatics)
Learning Assistant

Istanbul, Turkey
Feb 2024 - Present

TankX
HFT Quant Analyst

Istanbul, Turkey
Apr 2024 - Present

- Working on developing models to exploit arbitrage opportunities and empower a market making scheme.

Leibniz Institute on Aging – Fritz Lipmann Institute (FLI)
Research Intern

Jena, Germany
Jul 2023 - Oct 2023

- Advisor: Melike Donertas
- Worked on mice lifespan prediction using longitudinal microbiome data.
- Developed both traditional, ODE based population models and tools, and machine learning models.

Case Western Reserve University
Researcher

Ohio, USA
Apr 2023 - Nov 2023

- Advisor: Gurkan Bebek
- Created a novel R package with a C++ interface on gene regulatory network and pathway analysis that outperforms the current state-of-the-art by **50%** on average.

Optiver*Spring Insights Participant*Remote
Apr 2022

- Developed a trading algorithm optimizing according to the rules such as at most **200** orders per second in Python using JupyterLab.
- Learned how to optimize the hedging strategy in order to maximize PnL in a simulated exchange.

Sabanci University - CS 210 (Introduction to Data Science)*Learning Assistant*Istanbul, Turkey
Feb 2023 - Jun 2023AWARDS & ACTIVITIES

Algorithm Competition Summer Camp | C++

Discussed and learned advanced Data Structures and Algorithms topics.

Inzva
Jun 2022**Online Programming Contest for Universities | C++**

Qualified for the final round as one of the 3 teams from Sabanci University.

Inzva
Dec 2021**Olympiad in Informatics | C++**Ranked top **10%** in the first-round qualifiers for Turkish national team.TUBITAK
2020PROJECTS

Variant Calling and Evaluation Pipeline

Developed a complete pipeline that gets raw sequencing data and outputs significant variants based on literature, clinical data and scores out of in silico predictors. 2023

Sudoku Solver | C++

Created an algorithm that can solve the provided sudoku grids using backtracking. 2021