

## EDUCATION

**University of Edinburgh (UoE), Edinburgh** (September 2023-August 2024)

- **MSc in Computational Applied Mathematics: Distinction Grade (%75.4) (Equivalent to 3.70-4.00 GPA)**

**Relevant Coursework:** Industrial Mathematics, Stochastic Differential Equations, Uncertainty Quantification, Methods for Causal Inference, Numerical Methods for Data, Research Skills for CAM, Bayesian Theory

**Bogazici University, Istanbul** (September 2018- June 2023)

- **BSc in Industrial Engineering** (Being ranked in top 0.05 percentile in National University Admission Exam is required for admission to the programme) **GPA: 3.56/4.00**

**Relevant Coursework:** Operations Research, Object Oriented Programming , Systems Science & Simulation, , Advanced Probability & Statistics, Agent Based Modelling, Statistical Forecasting and Time Series, Queuing Theory Studies

- **Minor Degree in Economics: GPA: 3.75/4.00 (Focus: Game Theory & Macroeconomics)**

**Technical University of Munich (TUM)** (April 2021 - August 2021)

- **Erasmus-Exchange Study**

**Relevant Coursework:** Machine Learning Methods and Tools, Graphical Models in Statistics

## RESEARCH &amp; INDUSTRY EXPERIENCE

**University of Edinburgh** (2024 June-August)**MSc Thesis Study (Under Dr. Michael Nicholson & Dr. Craig Anderson from Institute of Genetics and Cancer )**

- Built efficient stochastic simulation algorithms in Python with parallelised approaches to model mutagenesis in humans
- Generalised an existing model of mutagenesis to account for transcription effects in genic regions
- Implemented statistical estimators to quantify the DNA damage responsible for cancer mutations, evaluating their accuracy across various biological scenarios.
- Using simulated ground truth data, concluded that the estimator is accurate in many biological scenarios, while reporting specific conditions where it may perform poorly

**Bogazici University, Istanbul** (2023 February-June)**Voluntary Teaching Assistant (IE 306.02: Systems Simulation, Organised by Dr. Aybek Korugan)**

- Supported the course focused on stochastic processes, queuing theory, discrete event simulations, and statistical analysis for Computer Science students.
- Developed applied, real-world problems for assignments by researching course material, graded assignments, and provided feedback to students
- Managed large datasets, data manipulation and cleaning for assignment preparation

**ortak, Istanbul** (2022 September-October)**Founder's Team: Strategy Intern**

- Contributed to the launch of an innovative fintech platform
- Actively involved in every aspect of the startup, including competitor analysis, product roadmap, regulatory design
- Delivered thorough market insights on financial technologies to shape the platform's strategic direction

**Insider, Istanbul** (2022 January-May)**CEO's Executive Office: Strategy & Operational Excellence Intern**

- Worked directly with the COO and CEO, regularly synthesised insights from complex data analyses, crafting coherent stories and constructing persuasive arguments for presentations to C-Suite
- Developed and refined key communication materials including investor updates, board meeting briefs, shareholder gatherings
- Prepared and graded quantitative case studies for candidate assessments across all levels in the strategy department, and assisted in interviews

**Yemeksepeti, Istanbul** (2020 October-November)**System Analyst Intern**

- System analysis, requirement gathering, functional design preparation for application development and maintenance.
- Participated in backlog grooming activities and agile SCRUM ceremonies such as daily standups, sprint review, sprint planning

**Yapı Kredi Bank, Istanbul** (2020 August-September)**Process Management & Business Development Intern**

- Analysed sales data, branch reports, and market research. Developed and reported strategies to increase sales, reduce costs, and improve stock management
- Developed a report on Generation Z's spending behaviours, proposing an interactive game to improve data collection and user engagement

## VOLUNTEER EXPERIENCE

**Bogazici University Music Association (BUMK):**

- Founder & Director of Sponsorship Committee (2019-2021)

**Boğaziçi University Radio Club**

- Radio Host (2017-2020)

## TECHNOLOGIES

**Programming Languages:** Python, R, Julia (Advanced), SQL, C, NetLogo (Intermediate)

**Data Science & Analytical Tools:** NumPy, pandas, Sci-Py, scikit-learn, Matplotlib, seaborn, ggplot2, joblib, Plotly

**Version Control & Collaboration:** Git, G-Suite, Microsoft Office, JIRA

## CERTIFICATES &amp; ACHIEVEMENTS

**Strategic Management Course, LSE Summer School** (2018)

- Received A+ Grade, within the top 5% of participants

**University Admission Exam** (2017)

- Ranked in top 500 in 7 different exams among 2 million candidates
- Awarded Presidential Scholarship for 5 years for outstanding success

**Deutsches Sprachdiplom Stufe II**, (German Language C1 Advanced Level Certificate) (2017)

**High School Admission Exam** (2011)

- Ranked in 1st place in Turkey (shared with 350 others) among 1 million candidates