Ozgur Seker

oseker@sas.upenn.edu // +1 (267) 746-5774 linkedin.com/in/ozgurseker06 // github.com/ozgurseker

I am a PhD candidate in Economics with a strong foundation in mathematics, statistics, and econometrics. I specialize in developing quantitative models and employing innovative measurement techniques, and I am seeking quantitative roles where I can apply my analytical expertise to solve complex financial and economic problems.

EDUCATION

University of Pennsylvania, Philadelphia, PA

Ph.D. Candidate in Economics Relevant Coursework: Computational Economics, Macroeconomic Theory, Macro Financial Markets, Macroeconomic Theory, Market Design, Empirical IO, Adv. Econometrics, Machine Learning, Investment Management

Koc University, Istanbul, Turkey

M.Sc. in Economics, GPA: 3.88/4.0 (Highest in the cohort) Relevant Coursework: Adv. Game Theory, Asset Pricing, Investment, Introduction to Machine Learning, Algorithms

TOBB University of Economics and Technology, Ankara, Turkey

B.Sc in Economics, GPA: 3.68/4.0 B.Sc in Mathematics, GPA: 3.55/4.0 Relevant Coursework: Real Analysis, Measure Theory, Linear Algebra I-II

SKILLS

- Econometrics: Policy Evaluation, Hypothesis Testing, Experiment Design, Causal Inference •
- Structural Models: Developing, Simulating, and Estimating Agent-Based Structural Models •
- Statistics/ML: Decision Tree, Random Forest, Nearest Neighbors, K-Means Clustering, Neural Networks •
- Programming Languages: R, Python, Matlab, SQL, Julia, and Latex. •

RELEVANT EXPERIENCE

RESEARCH PROJECTS

Effects of Political Affiliation on Firm Investment Behavior

- Introduce a novel method to measure political affiliation by scraping Google Search results of 4000+ board members •
- Collected a novel firm-level investment data by scraping 3000+ yearbooks Turkey's stock exchange •
- Found that political alignment with the government increases stock market returns by 6-8%; decreases investment • probabilities for larger firms but increases for smaller firms

Competing Politically Connectible Firms – Quantitative Analysis

- Developed an endogenous growth model in which competing firms choose political connection and R&D activities •
- Simulated the model on Python to understand how political events and institutions affect corruption and innovation. •
- Showed that R&D activities decrease by 20% in the sector if the largest firm is connected to the government, and • political turnover increases the innovation. The results are consistent with the empirical results in the literature.

INDEPENDENT STARTUP PROJECT

RCM Fund Management, Remote

- Improved trading strategy accuracy by 30% using backtesting. •
- Built trading bots for IBKR, enabling real-time execution of strategies, reducing human intervention by 90%. •
- Automated the reporting of AI engines' theoretical performances, increasing decision making speed by 80%

ACHIEVEMENTS

- 7th in University Entrance Exam in Turkey (LYS) among 1.500.000 students. •
- Honourable Mention Prize in International First Step To Nobel Prize in Physics in 2011 •
- Bronze Medal in National Science Olympiads in Physics

Jan 2022 – May 2022

Sep 2022 - Sep 2024

Jul 2021 – Jan 2022

Aug 2016

May 2018

May 2025