

MUHAMMED IKBAL ORUC

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EDUCATION

Koç University

Expected graduation: June 2025

Private research university acclaimed for its number one-ranked economics program in Turkey

- Master of Arts in Economics with Research Thesis | [Full Merit Scholarship](#)

Scientific and Technological Research Council of Türkiye Research Scholarship

Government agency promoting science and technology research and development through scholarships | [\\$25,000 scholarship](#)

Georgetown University

- Double major in Economics (BA) and Computer Science (BA)

Relevant Courses: Econometrics, Microeconomics, Macroeconomics, Empirical Methods, Game Theory, Labor Economics, Algorithms, Artificial Intelligence, Data Structures, Distributed Systems, Linear Algebra, Real Analysis

WORK EXPERIENCE

Dataminr, NYC, USA, *Data Analyst and Research & Development Intern (Full-time until Jan. 2023)*

Jun. 2022 - May 2023

Artificial intelligence company providing real-time event detection and alerts to various clients

- Engineered data from 300+ media sources along the US-Mexico border to build a transnational crime dataset; integrated data with AI models, resulting in a [seven-figure government contract](#) and aiding in the apprehension of wanted individuals. (Python, Java)
- Architected a dynamic cryptocurrency alert system for hedge fund clients; extracted data from [25,000 cryptocurrency](#) projects, to monitor macroeconomic indicators, and enable data-driven high-frequency trading. (Python, Java).
- Implemented a company-wide workflow optimization initiative to accelerate data mining from GitHub, resulting in time savings of [1-2 hours per week](#) for content engineers and cybersecurity domain experts (Python, Java, SQL).
- Managed two environmental safety projects: engineered a data pipeline scraping satellite data of 10 Canadian provinces to detect forest wildfires in real-time and analyzed the illegal sale of biochemical substances on the dark web (Python, Java, SQL).

Perrfy, Palo Alto, USA *Full Stack Developer and Tech Lead*

May 2021 - Aug. 2021

Early-stage startup providing cost-effective search engine optimization and web design to businesses

- Oversaw the maintenance of the front and backend website as interim CTO, managing a team of 4 tech interns; integrated new design and product features into the website.
- Built a content creation tool that uses [web scraping, machine learning and natural language processing](#) to generate search-engine-optimized article outlines for users based on their topic of choice (Python, Node.js).
- Developed an algorithm to compute keyword search difficulty by leveraging insights derived from web scraping data from the top searched websites, enabling accurate rankings matching competitors charging [90% more for a similar service](#).

United States Agency for International Development (USAID), DC, USA *Data Analyst*

Sep. 2020 - May 2021

- Analyzed water consumption across villages in Syria and Palestine to find suitable water generation technology options (Python).
- Conducted financial analysis to determine cost-effective choices of water generation companies within the USAID Middle East and North Africa budget for the initiative; received a letter of appreciation from [US Secretary of State, Anthony Blinken](#).

RESEARCH

Impact of Syrian Refugee Crisis on Turkish Native Female Fertility and Labor Market Outcomes

Masters Thesis with Prof. Murat Güray Kırdar and Murat Demirci

- Employing instrumental variables and difference-in-differences to analyze the impact of the Syrian refugee crisis on Turkish women's fertility and labor outcomes, through mechanisms such as changes in income, education, health, rent, and domestic help costs.

High Inflation, Currency Depreciation, and Price Dispersion: Evidence from Turkish Grocery Retailers

Research Scholarship with Prof. Mehmet Özsoy and Emrehan Aktuğ

- Web scraping and analyzing daily price data of staple goods from major Turkish retailers, online delivery service applications and local stores to model inflation and price dispersion of the Turkish economy.

Market Dynamics and Labor Implications in the Ride-Sharing Economy: Modeling Uber's Pricing and Employment Structure

Final Research Paper in Labor Economics

- Assessed Uber's economic model to quantify its impact on driver earnings and market dynamics using the Oaxaca-Blinder decomposition OLS regression methodology to develop a monopsonistic model to explain Uber's pricing algorithm.

EXTRACURRICULAR

Campfire Music Foundation, *Board Member*

May 2022 - Present

Grassroots NGO aiming to build a new model of music streaming economics to pay artists more fairly

The Students of Georgetown Incorporated, *Accountant*

Sep. 2019 - Jan. 2020

Non-profit, operating seven on-campus coffee shops and grocery subsidiaries with over [\\$5 million in annual revenues](#).

SKILLS

Programming: Python, Pandas, Web Scraping (advanced) C++ (advanced), Java (advanced), MATLAB (intermediate)

Data Analytics: Stata (advanced), Looker (advanced), SQL (intermediate), Snowflake (intermediate)

Languages: English (native), Turkish (fluent), Arabic (intermediate proficiency)