

HAMDİ İŞİNER KÖSE

Senior Data Scientist

h.isinerkose@gmail.com · +90 531 945 31 31 · Remote, Ankara

SKILLS

ML / AI

ML Research ·
Deep Learning ·
GNN · NLP
Feature Eng.

Code

Python · R · SQL · Stata
MATLAB · LaTeX

Econometrics

DAG · OLS · IV · 2SLS ·
GMM · DiD · RDD ·
DSGE · Time Series

Libraries

pandas · PyTorch Geometric ·
DGL · NetworkX · Scikit-learn ·
Plotly · Featuretools

Domain

International Trade
Commercial Banking
Startups

EDUCATION

Data Science & AI

Koç University
2019 – 2020 · İstanbul

MSc Economics

CEMFI, Madrid
2016 – 2018 · CGPA 74/100

BA Economics

Bilkent University
2012 – 2016 · GPA 3.61
Magna Cum Laude

LANGUAGES

• Turkish — Native
• English — Fluent

EXAMS & CERTIFICATIONS

• ML — Stanford Online
• GRE Quant — 170/170
• IELTS — 7.5
• TOEFL — 104

REFERENCES

• Upon request

SUMMARY

Senior data scientist with 6+ years delivering production ML solutions across banking, fintech, and international trade. MSc from CEMFI (Madrid). Experienced designing end-to-end pipelines, collaborating with cross-functional teams, and translating complex analytical problems into scalable business-ready solutions. Research-grade econometrics background combined with strong engineering practice and a consistent record of co-authoring applied research.

WORK EXPERIENCE

Senior Data Scientist

Mar 2024 – Present

MarketCalculus · Ankara / Remote

- Owned end-to-end development and production deployment of a Graph Neural Network model for bilateral trade flow prediction at HS6 level, incorporating Gravity Model covariates; led all stages from data collection, preprocessing, and model design through to deployment, documentation. Findings published at an IEEE conference in 2025.
- Built a custom data acquisition and ETL pipeline integrating web scraping, bulk downloads, and API access across multiple customs and trade data sources, standardising heterogeneous inputs into a unified schema and eliminating the need for paid data subscriptions — saving thousands in annual costs.
- Engineered an LLM-powered trade strategy generation system that ingests heterogeneous data sources — including customs trade flows, producing step-by-step, context-grounded strategy outputs via structured prompt pipelines with systematic output evaluation.
- Developed interactive Plotly/Dash dashboards featuring dynamic graph-based map visualisations and multi-representation trade flow views, enabling stakeholders to explore bilateral trade patterns and model outputs across countries and product categories in real time.

Co-Founder

May 2021 – Aug 2023

Remotify.co · Estonia / Remote

- Co-founded a cross-border fintech platform serving freelancers across 180+ countries, growing to €100K+ in transaction volume through targeted go-to-market strategy and 200+ direct sales engagements.
- Defined product positioning and customer acquisition strategy, translating regulatory and operational complexity into a clear value proposition for a globally distributed user base.
- Built and coordinated a fully remote cross-functional team of 9 across product, operations, and sales, establishing communication workflows that kept delivery aligned across time zones and disciplines.

R&D Data Scientist

Oct 2019 – Oct 2020

QNB Finansbank · Istanbul / Hybrid

- Designed and built an automated feature generation framework in Python (pandas, Featuretools) to produce large-scale, human-interpretable and explainable features from a minimal set of source variables; applied to accounting data for early-default signal detection in firms and subsequently extended to KKB credit scoring data..
- Identified and analysed combinatorial feature explosion as the core scalability bottleneck — demonstrating that adding a single generation layer or a small number of seed features causes the feature space to exceed 10^6 , rendering standard pandas/SQL pipelines computationally infeasible at enterprise scale; contributed findings to a co-authored conference paper submission on explainable automated feature engineering.

Model Development Analyst

Oct 2018 – Oct 2019

QNB Finansbank · Istanbul / On-site

- Contributed to end-to-end development of credit scoring models on a corporate loan portfolio exceeding \$100M alongside the Credit Risk Modelling team — spanning data sourcing, dataset construction, model development, backscoring, and calibration.
- Validated existing credit models using logistic regression and ensemble ML algorithms, optimised large-scale SQL queries for computational performance, and translated model outputs into actionable lending rules for the credit policy team.

SELECTED PROJECTS

- GNN for Bilateral Trade Prediction (2024): Published research applying Graph Neural Networks to HS6-level bilateral trade flow prediction with Gravity Model covariates.
- Loan Shark Detection — Koç University (2020): Final project for Data Science & AI certification. Applied ML classification techniques to detect predatory lending patterns in financial data.
- Political Polarization in Turkish Media (2016): Classified 20,000+ articles from 100+ columnists across 15 newspapers using KNN. Recommended for publication.