EMRE KESICI

🖥 www.emrekesici.com

EDUCATION

The University of Texas at San Antonio • San Antonio, TX, USA   2017 – 2021
Ph.D. in Finance • *GPA: 3.9/4.0*
Ph.D. Dissertation: Essays on Social Networks and Investments

The University of Texas at San Antonio • San Antonio, TX, USA   2019 – 2020
Secure AI and Autonomy Lab • *Research Fellow*
Research Interests: AI, and ML Applications in Finance

London Business School • London, UK   2015 – 2017
Master in Finance • *Post-experience MBA level* • *GPA: 3.6/4.0*
Research Interests: Capital Markets, Behavioral Finance, and Investments

Istanbul University • Istanbul, Turkey   2011 – 2014
Master in Economics • *GPA: 3.6/4.0*
Research Interests: Money, Capital Markets and Financial Institutions
Master's Thesis: Insider Trading, Measures of Insider Trading and Effectiveness of the Measures

Bilkent University • Ankara, Turkey   2003 – 2007
B.S. in Business Administration and Management • *GPA: 3.1/4.0*

EXPERIENCE

Vice President – Quantitative Risk, Model Developer, Market Risk Analytics – Citibank N.A. Dec 2020 – Present
Dallas, TX, USA

- Supporting market risk analytics projects in multiple areas, including Fundamental Review of the Trading Book, the next generation of market risk regulatory framework, Comprehensive Capital Analysis and Review, LIBOR transition.
- Developing market risk models critical for quantifying the market risk exposures of Citi's trading book and calculating regulatory capital.
- Collaborating with other teams include Risk IT to implement new models, resolve production issues and enhance existing implementation.
- Calibrating model parameters, perform variance analysis to explain the changes in model output due to parameter updates.
- Performing ongoing analysis of models, including backtesting and profit attribution analysis.

Graduate Research Assistant – UTSA Department of Finance   Aug 2017 – Dec 2021
San Antonio, TX, USA

- Experienced using Python, R, SAS and Stata libraries such as scikit-learn, numpy, pandas, matplotlib, scipy, statsmodels, pytorch, tensorflow, ggplot2, caret, mice, tibble, tidyr, and dplyr.
- Worked on research projects regarding venture capital investment structures using statistical analysis and modeling, textual analysis, sentiment analysis, event studies, topic modeling, supervised, and unsupervised learning, classification models, cluster analysis, neural networks, non-parametric methods, and multivariate statistics.
- Completed more than 40 research projects using Python, R, Stata, MATLAB, SAS, MySQL, Tableau and Microsoft Power BI.
- Assisted professors for their empirical researches and teaching.

Research Fellow –UTSA Secure AI and Autonomy Lab   Sep 2019 – Aug 2020
San Antonio, TX, USA

- Experienced using AI applications in finance research area. Worked on research projects regarding reinforcement learning, financial time series complexity reduction and AI applications for venture capital investments.
- Mentored 4 students enrolled in Master of Science Data Analytics program for their practicum projects including Bloomberg database and Crunchbase API. Mentored 2 students enrolled in M.S. in Computer Science program for their projects.

Senior Specialist in Capital Markets – Capital Markets Board of Turkey   Jan 2009 – Nov 2016
Istanbul, Turkey

- Participated operational risk management projects under the IOSCO Committee on Regulation of Secondary Markets (Committee 2) concerning IOSCO member countries' capital markets, and their resilience to any disruptions. Processed audit reports on "Cyber Security for Secondary Markets", "Mechanisms for Trading Venues to Effectively Manage Electronic Trading Risks and Plan for Disruptions", "Bond Market Liquidity", and provided consultancy reports on operational risks of stock exchanges and financial institutions.

- Promoted to be an audit team leader to conduct and develop quantitative and analytic models in order to identify credit and default risks of investment firms and created regulatory solutions for those risks. Oversaw, investigated and reported any suspicious transactions of domestic and foreign investors in Turkish capital markets.
- Conducted risk analyses on financial accounts of public companies and inspected state-owned institutions including Istanbul Stock Exchange as per capital markets' regulations.
- Led more than 80 audit projects, and managed teams investigating IPO stock valuations, insider trading, market manipulation, unauthorized capital markets activities, violations of margin trading and short sales, illegal transfer pricing activities, money laundering and terrorism financing.
- Produced a proficiency thesis on "Market Surveillance of Option Markets and Market Oversight Proposals for Turkish Capital Markets". Attended 14 international conferences regarding capital markets topics held by SEC, CFTC, Federal Reserve Bank of Chicago, TAIEX, OECD, IOSCO and Capital Markets Licensing Agency.

Areas of Interest

- Primary fields: Artificial Intelligence, FinTech, Risk Analytics, Entrepreneurial Finance, and Social Networks.
- Secondary fields: Data science and its applications in finance.

Working Papers

- The Impact of Social Networks on Home Equity Bias, with John K. Wald. *In progress.*
- The Impact of Social Media on Venture Capital Investment Structures: Evidence from Twitter Interactions, with Onur Bayar, *submitted and presented FMA 2019.*
- Artificial Intelligence in Success Prediction for Early-Stage Tech Startups: Using Soft and Hard Data. *In progress.*
- The Impact of Sports Injuries on The American Healthcare System with a Neurological Focus". *In progress.*
- Covered Interest Rate Parity, with John K. Wald. *In progress.*

Publications

- Improving Financial Time Series Prediction Accuracy Using Ensemble Empirical Mode Decomposition and Recurrent Neural Networks. IEEE Access, 8, 117133-117145, 2020 with Chacón, H. D. and Najafirad, P.
- Heterogeneity in the information content of 8-K disclosures about private targets: Acquirer size and target significance. Global Finance Journal, 100559, 2020 with Bayar, O. and Das, S.
- Insider Trading, Measures of Insider Trading and Effectiveness of the Measures, M.A. Thesis, Istanbul University, Department of Economics, 2014, Istanbul/Turkey.
- Market Abuse Activities in Capital Markets, Capital Markets Journal, Number:15, 2014, Ankara/Turkey.
- Insider Trading and Market Manipulation Regulations in Capital Market Law No. 6362, Capital Markets Journal, Number: 13, 2013, Ankara/Turkey.
- Market Surveillance of Option Markets and Market Oversight Proposals for Turkish Capital Markets., Proficiency Thesis, Capital Markets Board of Turkey, 2012, Ankara/Turkey.
- Naked Short Selling Regulations of Securities Exchange Commission after 2008 Financial Crisis, Capital Markets Journal, Number:7, 2011, Ankara/Turkey.

Invited Conference Presentations

- The American Finance Association Ph.D. Poster Session, Chicago, IL, 2021
- Financial Management Association Doctoral Student Consortium, New York, NY, 2020.
- Financial Management Association, New Orleans, LA, 2019
- Turkish Capital Markets, 2015, Organized by Capital Markets Research and Application Center, Istanbul University, Istanbul/Turkey.
- Latest Topics on Turkish Capital Markets, 2014, Organized by Capital Markets Licensing and Training Agency, Istanbul/Turkey.
- On-line Financial Crimes and Fraud Committed with Electronic Means of Payment and Topics on Cyber Crime, 2012, Organized by Technical Assistance and Information Exchange Instrument of the European Commissions (TAIEX), Istanbul/Turkey.

Teaching Experience

- Survey of Finance (Lecturer, Summer 2020, and Fall 2020)
- Principles of Investment (Teaching Assistant to Dr. Wang, 2020)
- International Financial Markets (Teaching Assistant to Dr. Wang, 2019)
- Principles of Business Finance (Teaching Assistant to Dr. Bayar, 2018, 2019, 2020)
- Entrepreneurial Financial Management (Teaching Assistant to Dr. Bayar, 2017)
- Derivative Markets and Instruments (Teaching Assistant to Dr. Misra, 2018)
- Cases and Problems in Finance (Teaching Assistant to Dr. Burns, 2017)

Honors & Rewards

- CFA Institute Program Access Scholarship for calendar year 2020 ($\sim$ \$1.000)
- University of Texas at San Antonio Artificial Intelligence Research Fellowship (\$12.000 per year)
- University of Texas at San Antonio PhD in Finance Fellowship ($\sim$ \$140.000)
- Turkish Government Full Scholarship for Master in Finance degree at London Business School ($\sim$ \$100.000)

Technical Skills

- Programming and Software: Python, R, STATA, SAS, MATLAB, SQL, Git, LaTeX, VBA, Tableau, Microsoft Power BI.
- Data: Facebook, LinkedIn, Crunchbase, Twitter, Bloomberg, and Google Geocoding APIs, Thomson Reuters Eikon, SDC VentureXpert, Morningstar Data, Compustat, S&P Capital IQ, Eventus, CRSP, IBES, WRDS, SEC Analytics Suite.