October 9, 2026

Selman Erol

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Employment

Associate Professor, CMU Tepper School of Business, 2025 - present

Assistant Professor, CMU Tepper School of Business, 2017 - 2025

Postdoctoral Associate, MIT Department of Economics, 2016 - 2017, hosted by Daron Acemoglu

Other Experience and Affiliations

Member, Macro Finance Society, 2025 - present

Member, Critical Technology Initiative, CMU, 2024 - present

Member, Finance Theory Group, 2016 - present

Director of Undergraduate Research in Economics, CMU Tepper, 2022 - 2026

Education

Ph.D. Economics, University of Pennsylvania, 2016
Dissertation: *Network Formation and Its Impact on Systemic Risk*. Advised by Rakesh Vohra

M.A. Economics, Bilkent University, 2009

B.Sc. Mathematics, Bilkent University, 2007

Fellowships, Awards, and Grants

- International Fellowship for Outstanding Researchers, TUBITAK, 2025
- Richard M. Cyert **Excellence in Teaching** Award, CMU, 2025
- Technology Choice and Resilience, Alfred P. **Sloan Foundation Grant**, 2024-2025
- Elsevier **Best Paper** on Financial Institutions, **Western Finance Association**, 2020
- Financial Network Reactions to Regulations and Interventions, **NSF Grant** 1919351, 2019-2023
- Richard M. Cyert **Excellence in Teaching** Award, CMU, 2019
- Hakan Orbay Young Researcher Award, Sabanci University, 2018
- The Berkman Faculty Development grant, CMU, 2018
- William Polk Carey Prize for **best dissertation**, UPenn, 2017 (shared with Max Wei)
- Young Scholar Award, Turkish American Scientists and Scholars Association, 2017
- Second place for **Best Job Market Paper** Award, **Finance Theory Group**, 2016
- Lawrence Robbins Prize for **best student** in the first year, UPenn, 2010 (shared with Zehao Hu)
- Silver Medal, 44th **International Math Olympiads**, Japan, 2003

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Research

Publications and accepted papers

• Civil Liberties and Social Structure
with Camilo García-Jimeno
American Economic Journal: Microeconomics, conditionally accepted

• Tor-Periphery Insider Networks
with Michael Junho Lee
Journal of Economic Theory, 106103, 2025

• Contagion in Graphons
with Francesca Parise and Alexander Teytelboym
Journal of Economic Theory, 211: 105673, 2023

• Network Formation and Systemic Risk
with Rakesh Vohra
European Economic Review, 148: 104213, 2022

• Relationship Externalities
with Rakesh Vohra
Journal of Economic Theory, 206: 105567, 2022

• Network Reactions to Banking Regulations
with Guillermo Ordoñez
Journal of Monetary Economics, 89: 51-67, 2017

• Negative Certainty Independence without Betweenness
with David Dillenberger
Economics Letters, 120(3): 596-598, 2013

• Existence, Optimality and Dynamics of Equilibria with Endogenous Time Preference
with Cuong LeVan and Cagri Saglam
Journal of Mathematical Economics, 47: 170-179, 2011

• Poster: Timestamp Verifiability in Proof-of-Work
with Tzuo Hann Law and Lewis Tseng, **[MobiHoc 2023]**

• Extended abstract: Contagion in Graphons
with Francesca Parise and Alexander Teytelboym, **[EC 2020]**

Working Papers

• Interbank Networks in the Shadows of the Federal Reserve Act
with Haelim Anderson and Guillermo Ordoñez
Revise and resubmit at **Review of Economic Studies**
Elsevier **Best Paper** on Financial Institutions, Western Finance Association, 2020

• Financial System Architecture and Technological Vulnerabilities
with Michael Junho Lee
Revise and resubmit at **Journal of Finance**

• Network Hazard and Bailouts
Finance Theory Group, **Best Job Market Paper**, Runner-up Prize, 2016

• Coverage Guarantees as Ambiguity Sets: Coherent Decision Making under Statistical Uncertainty
with Rakesh Vohra

• Unintended Consequences of Regulating Central Clearing
with Pablo D'Erasmo and Guillermo Ordoñez

• The Anatomy of Financial Exposures
with Pablo D'Erasmo and Guillermo Ordoñez

• Network Hazard: Resilience and Moral Hazard in Network Formation

• Stability Pass-through to Shadow Banking
with Haelim Anderson and Guillermo Ordoñez

• Network Hazard and Superspreaders
with Musa Eren Celdir

• Social and Economic Distancing
with Guillermo Ordoñez

Presentations

2024: Pan Asian Macro-Finance, Stony Brook Game Theory, Essex-UCL Decentralized Financial Markets, Bosphorus Workshop in Economic Design, FED Interconnectedness of Financial Systems.
2023: UW Madison, Ozyegin U., Retreat on Information Networks and Social Economics, Search and Matching in Macro and Finance, Institute for Mathematical Sciences NUS Workshop on Games on Networks, Western Finance Association, Bank of Canada Networks in Finance, Financial Intermediation Research Society, Society for Financial Studies Cavalcade, NSF Network Science.
2022: European Finance Association.
2020: UT Austin McCombs (brownbag), American Finance Association (discussion), Federal Reserve Short-Term Funding Markets, USC Fixed Income and Financial Institutions, Western Finance Association.
2019: Stony Brook U., Einaudi Institute for Economics and Finance, U. Bristol, U. Edinburgh, U. Cambridge, U. Oxford, Oxford Said, LBS, PSE, IESE Business School, Wash.U. Corporate Finance (discussion), Federal Reserve Short-Term Funding Markets (discussion), Retreat on Information Networks and Social Economics, Society for Economic Dynamics, Tepper-LAEF, NBER Summer Institute, NSF Network Science, Pennsylvania Economic Theory, Barcelona GSE Summer Forum.
2018: Sabanci SOM, Cleveland FED, Bilkent U., U.Miami, CSEB, U.Penn Warren Center, Columbia U. INET, Laboratory for Aggregate Economics and Finance OTC workshop, NSF Network Science Co.
2017: Yale SOM, Office of Financial Research, MIT Econ (brownbag), MIT LIDS, U.Pitt, PUCC, Yale Cowles Macro (discussion), USC Fixed Income and Financial Institutions (discussion), Society for Economic Dynamics, Finance Theory Group, NASN, Laboratory for Aggregate Economics and Finance OTC workshop.
2016: UNC Chapel Hill, Columbia U. INET, Boston U., U. Rochester, JHU Carey, U. Maryland Smith, CMU Tepper, MIT Sloan, IFRRG Philadelphia FED Co., Bosphorus Workshop in Economic Design, Carnegie-Rochester-NYU, Econometric Society Summer Meeting, NSF Network Science.
2015: Philadelphia FED, CMU Tepper, Midwest Economic Theory, World Congress of the Econometric Society, Econometric Society Summer School, NSF Network Science.

Organization

Co-organizer, FTG Annual Meeting, 2019, 2026
Co-organizer, Workshop on Networks in Finance, Warren Center, UPenn, 2023 (with Ordoñez and Vohra)
Program Committee, NSF/NBER/CEME Decentralization, 2021
Program Committee, SED, 2019, 2021
Co-organizer, Tepper-LAEF, 2019 (with Davydiuk, Gupta, and Kydland)
Co-organizer, Workshop on Networks and Systemic Risk, Warren Center, UPenn, 2015 (with Vohra)

Referee Service

American Economic Review, Econometrica, Journal of Political Economy, Journal of Finance, Review of Financial Studies, Management Science, American Economic Journal: Microeconomics, Economic Theory, European Economic Review, Games and Economic Behavior, International Economic Review, International Journal of Central Banking, International Journal of Game Theory, Journal of Economic Behavior & Organization, Journal of Economic Dynamics and Control, Journal of Economic Theory, Journal of European Economic Association, Journal of Financial Services Research, Journal of Monetary Economics, Journal of Public Economics, Mathematical Social Sciences, National Science Foundation, Theoretical Economics, Theory and Decision.

Teaching and Advising

Teaching

- Undergraduate Intermediate Microeconomics, ECO-73230, CMU, 2017-present
  Richard M. Cyert **Excellence in Teaching Award**, CMU, 2019, 2025
- Doctoral Economics of Networks, BUS-47886, CMU, 2022-present
- Undergraduate Market Design, ECO-73315, CMU, 2026-present
- Undergraduate Game Theory for Economists, ECO-73347, CMU, 2019-2021

Advising

- **Director of Undergraduate Research** in Economics, CMU, 2022 - 2026
- Undergraduate advising at CMU: Joanna Tan, Buckley DeJardin, Minjae Lee, Margaret Chai
- Doctoral advising at CMU: Zahra Ebrahimi (Finance), Musa Eren Celdir (Operations Management), Ali Oguz Polat (Economics), Alexander Williams (Economics)