

Majid Mahzoon
University of Central Florida
Department of Economics
Orlando, FL 32826
Phone: (412) 313-3855
Email: majid.mahzoon@ucf.edu
Website: www.majidmahzoon.com

EMPLOYMENT

Assistant Professor, Department of Economics, University of Central Florida, Fall 2023 – Present

EDUCATION

Ph.D. Economics, Carnegie Mellon University, May 2023
M.Sc. Economics, Carnegie Mellon University, 2019
M.Sc. Electrical and Computer Engineering, Carnegie Mellon University, 2017
B.Sc. Electrical Engineering, Sharif University of Technology, Iran, 2013

FIELDS OF SPECIALIZATION

Primary: Game Theory, Information Economics, Mechanism Design
Secondary: Industrial Organization

DISSERTATION

Essays on Network Economics

Committee: Prof. Ali Shourideh (Chair), Prof. Maryam Saeedi (Chair), Prof. James A. Best, Prof. Luca Rigotti

JOB MARKET PAPER

“Hierarchical Bayesian Persuasion: Importance of Vice Presidents”

We study strategic information transmission in a hierarchical setting where information is transmitted through a chain of agents up to a decision maker whose action is of importance to every agent. This situation could arise whenever an agent can communicate to the decision maker only through a chain of intermediaries, for example, an entry-level worker and the CEO in a firm, or an official in the bottom of the chain of command and the president in a government. Each agent can decide to conceal part or all the information she receives. Proving we can focus on simple equilibria, where the only player who conceals information is the first one, we provide a tractable recursive characterization of the equilibrium outcome, and show that it could be inefficient. Interestingly, in the binary-action case, regardless of the number of intermediaries, at most four pivotal ones determine the amount of information communicated to the decision maker. In this case, our results underscore the importance of choosing a pivotal vice president for maximizing the payoff of the CEO or president.

OTHER RESEARCH PAPERS IN ECONOMICS

“Indicator Choice in Pay-for-Performance,” working paper, with Ali Shourideh and Ariel Zetlin-Jones

“Pricing and Mergers in Complex Networks: The Case of Natural Gas Pipelines”, work in progress, with Ali Shourideh and Maryam Saeedi

“Solving the Hierarchical Bayesian Persuasion,” work in progress

PUBLICATIONS IN ELECTRICAL AND COMPUTER ENGINEERING

1. “Queue-based Broadcast Gossip Algorithm for Consensus”: IEEE 2016, with S. Kar, R. Negi, A. Sahu
2. “Energy-Constrained Distributed Learning and Classification by Exploiting Relative Relevance of Sensors Data”: Published in IEEE Journal on Selected Areas in Communications, May 2016, with C. Li, X. Li, P. Grover
3. “Using Relative-Relevance of Data Pieces for Efficient Communication, with an Application to Neural Data Acquisition”: IEEE 2014, with H. Albalawi, X. Li, P. Grover
4. “Information Friction Limits on Computation”: IEEE 2014, with P. Vyavahare, P. Grover, N. Limaye, D. Manjunath
5. “From Source Model to Quantum Key Distillation”: An Improved Upper Bound: IEEE 2014, with K. Keykhosravi, A. Gohari, M. R. Aref

TEACHING EXPERIENCE

Game Theory and Economics, University of Central Florida, Spring 2024
Data Visualization, University of Central Florida, Fall 2023
Spreadsheets in Business Analytics, University of Central Florida, Fall 2023
R Tutorial, Carnegie Mellon University, Summer 2022 and Spring 2023
PhD Math Camp, Carnegie Mellon University, Summer 2020 and Summer 2021

GRANTS AND AWARDS

Homaira Akbari Endowed Fellowship, Carnegie Mellon University, Fall 2022
EQT Foundation Grant, Carnegie Mellon University, Fall 2020–Spring 2022
William Larimer Mellon Fellowship, Carnegie Mellon University, Fall 2017–Spring 2020
Carnegie Institute of Technology Dean’s Tuition Fellowship, Carnegie Mellon University, Fall 2013