

Chin-Chia (Kenny) Hsu

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RESEARCH SUMMARY My research interest lies at the intersection of *economic behavior and design for social systems*, with a focus on user behavior on social media, including judgement and decision making, information sharing, subscription to news media, and news market. I establish and analyze models using tools and techniques from game theory, microeconomics, optimization, probability theory, and statistics.

EDUCATION **Massachusetts Institute of Technology (MIT)** 2016-2022
Ph.D. in Social and Engineering Systems and Statistics, GPA: 5.0/5.0
Interdisciplinary Doctoral Program in Statistics (IDPS)
Committee: Ali Jadbabaie (Chair, advisor), Muhamet Yildiz, Dirk Bergemann, Amir Ajorlou

National Taiwan University (NTU) 2011-2015
Bachelor of Science in Electrical Engineering (EE), GPA: 4.28/4.30

RESEARCH INTERESTS Social Media Platforms, Information Choices, Strategic Communication and Persuasion, Information Design

WORK EXPERIENCE **Microsoft** Redmond, WA
Post Doc Researcher 2022-current

Taiwan Mandatory Military Service Kaohsiung, Taiwan
Second Lieutenant, Liaison Officer 2015-2016

PUBLICATIONS **Persuasion, News Sharing, and Cascades on Social Networks**
with Amir Ajorlou and Ali Jadbabaie
Journal version: *SSRN 3934010*, under review in *Theoretical Economics*
Preliminary conference version: *IEEE CDC 2021*
Spotlight story on *MIT News*, Dec. 15, 2021

- Developed a game-theoretic model of sharing decisions among social media users who try to persuade their followers to take similar actions
- Showed that in a population with dense social networks or sharply polarized, low credibility news can result in a larger cascade than credible news
- Provided a theoretical foundation for recent empirical observations demonstrating faster and wider spread of low-credibility and false information on social networks

Information Disclosure and Network Formation in News Subscription Services

Amir Ajorlou, Muhamet Yildiz, and Ali Jadbabaie

Preliminary conference version: *IEEE CDC 2020*

In preparation for journal submission

- Studied the choices of subscribers with diverse subjective views who strategically select a news intermediaries who may have information about the state but have media bias in news reporting
- Demonstrated that centrist subscribers choose to receive the news from the intermediary with the opposing view whereas the extremists prefer the intermediary with aligned ideology
- Offered insights into how individuals select their information source when news is private or costly to obtain while speculating the strategy by partisan news intermediaries who have persuasion motives

HONORS AND AWARDS	Simons-Berkeley Research Fellowship, Simons Institute UC Berkeley	2022
	Taiwan Government Scholarship to Study Abroad	2019-2021
	Student travel support, IEEE CDC	2020-2021
	Travel grant, 5th Annual Conference on Network Science and Economics	2019
	IDSS Fellowship	2016
	Honorary Member, Phi Tau Phi Scholastic Honor Society	2015
	NTU Presidential Awards for 8 semesters	2011-2015
	Young Fellow Scholarship Award, Microsoft Research Asia and IEEE	2014
	MoST Undergraduate Research Fellowship, Taiwan	2014
	NTUEE 1960 Alumni Scholarship, NTU	2012, 2014
Mr. Hsiung-Chen Lin Memorial Scholarship	2013	
TALKS	The 7th Annual Conference on Network Science and Economics, University of Chicago's Booth School of Business	2022
	60th IEEE Conference on Decision and Control, virtual	2021

	INFORMS Annual Meeting, Anaheim, CA	2021
	Midwest Economic Theory conference, Michigan State University	2021
	32nd Stony Brook International Conference on Game Theory, poster session, virtual	2021
	Informationally Speaking Seminar Series, NTU	2020
	59th IEEE Conference on Decision and Control, virtual	2020
	5-Speakers × 5-Minute Research Presentations, MIT-Harvard Taiwanese Associations, virtual	2020
	The 5th Annual Conference on Network Science and Economics, Indiana University Bloomington	2019
PROFESSIONAL SERVICE	Reviewer for <i>IEEE Transactions on Control of Network Systems</i> , <i>IEEE Transactions on Automatic Control</i> , <i>IEEE American Control Conference</i> , <i>IEEE Conference on Decision and Control</i>	
	Session Chair, Midwest Economic Theory Conference	Fall 2021
	Session Chair, INFORMS Annual Meeting	2021
COMMUNITY SERVICE	SES Student Councilor, IDSS	2020-2021
	MIT Graduate Application Assistance Program for EECS and IDSS	2020-2021
	Member, Public Relations, Federation of Taiwanese Student Association in New England	2018-2019
	Vice President, MIT Republic of China Student Association (ROCSA)	2017-2018
SKILLS	Programming: MATLAB, Python, C++ Languages: Mandarin (Native), English (Fluent), Japanese (Elementary)	
REFERENCES	Ali Jadbabaie (Chair) JR East Professor of Engineering Head, Department of Civil and Environmental Engineering, MIT (617) 253-7339 jadbabai@mit.edu	
	Muhamet Yildiz Professor of Economics Department of Economics, MIT (617) 253-5331 myildiz@mit.edu	
	Amir Ajorlou Research Scientist Laboratory for Information & Decision Systems, MIT	

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