Xiao Lin

CONTACT INFORMATION

Department of Economics
The Pennsylvania State University
University Park, PA 16802, USA

Phone: (814)-852-9916
Email: xiao@psu.edu
https://sites.google.com/view/xiaolin-econ

EDUCATION

Ph.D. in Economics, Pennsylvania State University, 2016–2022 (expected)
Advisor: S. Nageeb Ali

B.A. in Economics and B.S. in Mathematics, Wuhan University, 2012–2016

FIELDS OF INTEREST

Economic Theory, Information Economics, Robust Learning

WORKING PAPERS

"Credible Persuasion," with Ce Liu **(Job Market Paper)**

Abstract: We propose a new notion of credibility for information design. A disclosure policy is credible if the sender cannot profit from tampering with her messages while keeping the message distribution unchanged. We show that the credibility of a disclosure policy is equivalent to a cyclical monotonicity condition on its induced distribution over states and actions. We characterize when credibility considerations completely shut down informative communication, as well as settings where the sender is guaranteed to benefit from credible persuasion. We apply our results to the market for lemons and bank runs. In the market for lemons, we show that no useful information can be credibly disclosed by the seller, even though a seller who can commit to her disclosure policy would perfectly reveal her private information to maximize profit. In the context of bank runs, whether the regulator can credibly perform a stress test to forestall a bank run depends on the welfare cost of a liquidity crisis.

"Robust Merging of Information," with Henrique De Oliveira and Yuhta Ishii

Abstract: When multiple sources of information are available, any decision must take into account their correlation. If information about this correlation is lacking, an agent may find it desirable to make a decision that is robust to possible correlations. Our main results characterize the strategies that are robust to possible hidden correlations. In particular, with two states and two actions, the robustly optimal strategy pays attention to a single information source, ignoring all others. More generally, the robustly optimal strategy may need to combine multiple information sources, but can be constructed quite simply by using a decomposition of the original problem into separate decision problems, each requiring attention to only one information source. An implication is that an information source generates value to the agent if and only if it is best for at least one of these decomposed problems.

PUBLICATION

"How to Sell Hard Information," with S. Nageeb Ali, Nima Haghpanah, and Ron Siegel
Quarterly Journal of Economics, forthcoming

HONORS AND AWARDS

Neil Wallace Best Third-Year Paper Award, Penn State University, 2019
RGSO Dissertation Award, Penn State University, 2019
Daniels Award, Penn State University, 2018
University Scholarship, Wuhan University, 2013-2015
University Freshman Scholarship, Wuhan University, 2012

PRESENTATIONS

Midwest Economic Theory Conference, 2021
Mannheim Virtual IO Seminar Series, 2020
Penn State Departmental Seminar, 2020
Penn State Theory Workshop, 2019, 2020, 2021

RESEARCH ACTIVITIES

Research Intern

- Microsoft Research (mentored by Nicole Immorlica), 2021

Research Assistant

- Nageeb Ali, 2019
- Nima Haghpanah, 2018, 2020
- Ran Shorrer, 2018

TEACHING EXPERIENCE

Teaching Assistant

- Graduate Micro Theory Topics (Yuhta Ishii), 2019
- Graduate Game Theory (Ron Siegel), 2019, 2020
- Graduate Math Econ (Henrique De Oliveira, Ran Shorrer), 2017

REFEREE SERVICE

Economic Theory, Games and Economic Behavior, International Economic Review, Journal of Economic Theory, NeurIPS

REFERENCES

S. Nageeb Ali
Department of Economics
Pennsylvania State University
nageeb@psu.edu
(814) 867-4822

Nima Haghpanah
Department of Economics
Pennsylvania State University
nima@psu.edu
(814) 863-4934

Yuhta Ishii
Department of Economics
Pennsylvania State University
yxi5014@psu.edu
(814) 863-3777