

YAROSLAV ROSOKHA

Department of Economics
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EDUCATION

- Ph.D. Economics, University of Texas at Austin May 2013
Dissertation: *Three Experiments on Decision-making Under Uncertainty in Dynamic Environments*
Committee Chair: Dale O. Stahl
- M.S. Economics, University of Texas at Austin May 2009
M.S. Applied Mathematics, University of Houston May 2007
B.S. Mathematics, Economics, University of Houston May 2006

EMPLOYMENT

- Associate Professor of Economics (*with tenure*), Purdue University Aug 2021 – present
Assistant Professor of Economics, Purdue University Jan 2017 – Aug 2021
Assistant Professor of Operations & Economics, Purdue University Aug 2013 – Dec 2016
Consultant, Magee and Magee Aug 2012 – Aug 2013
Economic Damages Analysis

RESEARCH INTERESTS

Game Theory, Behavioral Economics, Experimental Economics, Computational Economics, Machine Learning, Agent-based Models, Behavioral Operations Management

PUBLICATIONS

13. [“Beliefs, learning, and personality in the indefinitely repeated prisoner's dilemma”](#) (with David Gill) *forthcoming at American Economic Journal: Microeconomics*
12. [“Cooperation in Queueing Systems”](#) (with Chen Wei) *forthcoming at Management Science*
11. [“Public Leaderboard Feedback in Sampling Competition: An Experimental Investigation”](#) (with Brian Roberson and Stanton Hudja) *forthcoming at Review of Economics and Statistics*
10. [“Evolution of cooperation in the indefinitely repeated collective action with a contest for power”](#) (with Xinxin Lyu, Denis Tverskoi, and Sergey Gavrilets) *Economic Theory* (2024).
9. [“Mixed Strategies in the Indefinitely Repeated Prisoner’s Dilemma”](#) (with Julian Romero), *Econometrica* (2023), 91(6), pp. 2295-2331.
8. [“Analyzing Frictions in Generalized Second-Price Auction Markets”](#) (with Karthik Kannan and Vandith Pamuru) *Information Systems Research* (2023), 34(4), pp.1437-1454.
7. [“Learning Under Uncertainty with Multiple Priors – Experimental Evidence”](#) (with James Bland) *Journal of Risk and Uncertainty* (2021), 62, pp. 157-176.
6. [“Motivating Innovation: The Effect of Loss Aversion on the Willingness to Persist”](#) (with Kenneth Younge), *Review of Economics and Statistics* (2020), 102(3), pp. 569-582.
5. [“The Evolution of Cooperation: The Role of Costly Strategy Adjustments”](#) (with Julian Romero) *American Economic Journal: Microeconomics* (2019), 11(1), pp. 299-328.
4. [“Constructing Strategies in the Indefinitely Repeated Prisoner’s Dilemma”](#) (with Julian Romero) *European Economic Review* (2018), 104, pp. 185-219.

3. [“Impact of Compound and Reduced Specifications on Valuation of Projects with Multiple Risks”](#) (with Saurabh Bansal), *Decision Analysis* (2018), 15(1), pp. 27-46.
2. [“Humans are Not Machines: Impact of Queueing Design on Service Time”](#) (with Masha Shunko and Julie Niederhoff), *Management Science* (2018), 64(1), pp. 453-473.
1. [“Learning Under Compound Risk vs. Learning Under Ambiguity – An Experiment”](#) (with Othon Moreno), *Journal of Risk and Uncertainty* (2016), 53(2-3), pp. 137-162.

WORKING PAPERS

- [“On the Emergence of International Currency: An Experimental Approach”](#) (with Marcos Cardozo and Cathy Zhang) *R&R at Journal of Economic Behavior and Organization*
- [“Cooperation under the Shadow of Political Inequality”](#) (with Xinxin Lyu, Denis Tverskoi, and Sergey Gavrilets) *R&R at Journal of Economic Dynamics and Control*

WORK IN PROGRESS

- “Dynamics of beliefs, power, and inequality in within- and between-group cooperation and conflict” (with Xinxin Lyu, Denis Tverskoi, and Sergey Gavrilets)
- “Fairness in Machine Learning – An Experimental Analysis” (with Matthew Hashim, Karthik Kannan, Warut Khern-am-nuai, and Hajime Shimao)
- “Team Composition and Cooperation in Queueing Systems” (with Mouli Modak, Masha Shunko)

OTHER PUBLICATIONS

- Rosokha, Yaroslav, Sergey V. Lindeman, Sergiy V. Rosokha, and Jay K. Kochi. [“Halide recognition through diagnostic “anion- \$\pi\$ ” interactions: molecular complexes of Cl⁻, Br⁻, and I⁻ with olefinic and aromatic \$\pi\$ receptors.”](#) *Angewandte Chemie International Edition* 43, no. 35 (2004): 4650-4652.

RESEARCH GRANTS

- “Behavioral Economics in Food and Environmental Policy: A Principal-Agent, Machine Learning, and Experimental Economics Approach” (with Steven Y. Wu) USDA/NIFA, AFRI Foundational and Applied Science Program, Markets and Trade, **\$638,852**, 2023 – 2026
- “Dynamics of beliefs, power, and inequality in within- and between-group cooperation and conflict” (with Sergey Gavrilets), [The Department of Defense DEPSCoR Award](#), **\$600,000**, 2021 – 2024
- “Fairness in Machine Learning – An Experimental Analysis” (with Matthew Hashim, Karthik Kannan, Warut Khern-am-nuai, and Hajime Shimao), *The Blake Family Fund for Ethics, Leadership and Governance*, **\$17,000**, 2021 – 2022
- “Collusion, beliefs, and personal characteristics” (with David Gill), *The Blake Family Fund for Ethics, Leadership and Governance*, **\$10,000**, 2018 – 2019
- [“Learning Under Ambiguity – An Experiment”](#) (with Othon Moreno), [Russell Sage Foundation, Small Grants Program in Behavioral Economics](#), **\$4,241**, 2012 – 2013

PRESENTATIONS

- 2024:** American Economic Association Annual Meeting, San Antonio;
- 2023:** Economic Science Association North American Conference, Charlotte; Appalachian State University; Society for the Advancement of Economic Theory Annual Conference, Paris; IU-Purdue Conference on Experimental and Behavioral Economics, West Lafayette;

- Workshop on Computational and Experimental Economics in Memory of Jasmina Arifovic, Vancouver;
- 2022:** Economic Science Association North American Conference, Santa Barbara; Ohio State University; University of California, Davis (*virtual*); University of Pittsburg (*virtual*); University of Maryland; University of Alabama;
- 2021:** POMS Annual Conference (*virtual*); 7th Annual UEA Workshop on Behavioral Game Theory (*virtual*); INFORMS Annual Meeting (*virtual*);
- 2020:** Appalachian State University (*virtual*); INFORMS Annual Meeting (*virtual*); Florida State University (*virtual*); Economic Science Association Virtual World Meetings; Behavioral Operations Management Virtual Conference; NYC Computational Economics and Complexity Workshop at Eastern Economic Association Annual Conference, Boston; IU-Purdue Conference on Experimental and Behavioral Economics, Bloomington;
- 2019:** Southern Economic Association Annual Meetings, Fort Lauderdale; Economic Science Association North American Conference, Los Angeles; Economic Science Association World Meetings, Vancouver; Workshop on Computational and Experimental Economics, Barcelona; Conference in Honor of Dale Stahl, UT Austin; IU-Purdue Conference on Experimental and Behavioral Economics, West Lafayette;
- 2018:** Southern Economic Association Annual Meetings, Washington DC; Economic Science Association World Meetings, Berlin; The Society for Computational Economics 24th International Conference, Milan; Workshop on Experimental Economics and Entrepreneurship, Copenhagen; Chapman University;
- 2017:** IU-Purdue Conference on Experimental and Behavioral Economics, Bloomington; INFORMS Annual Meeting, Houston; Economic Science Association North American Conference, Richmond; University of Michigan; Society for the Advancement of Economic Theory Annual Conference, Faro; Indiana University;
- 2016:** Economic Science Association North American Conference, Tucson; INFORMS Annual Meeting, Nashville; École Polytechnique Fédérale de Lausanne (EPFL);
- 2015:** Economic Science Association North American Conference, Dallas; The Pennsylvania State University; Economic Science Association World Meetings, Sydney;
- 2014:** INFORMS Annual Meeting, San Francisco; POMS Annual Conference, Atlanta; The University of Texas at Dallas
- 2013:** Economic Science Association North American Conference, Santa Cruz;
- 2012:** Economic Science Association International Conference, New York; Economic Science Association North American Conference, Tucson; INFORMS Annual Meeting, Phoenix;

FELLOWSHIPS, HONORS, AND AWARDS

Distinguished Teacher: Quantitative Economics with Python (2021), Computing for Analytics (2019), Game Theory (2019, 2018), Agent-based Computational Economics (2019, 2018, 2017), Operations Management (2016), Computational Economics (2015)

Outstanding Teacher: Computational Economics (2020), Game Theory (2017, 2020), Behavioral Economics (2016, 2015), Operations Management (2016, 2015), Computing for Analytics (2016)

Krannert Faculty Fellow Award	2020 – 2021
Purdue University Teaching Academy Award for Exceptional Teaching and Instructional Support	2021
Purdue Research Foundation Award	Summer 2020
PRF International Travel Grant	2015, 2018, 2019

Professional Development Award	2012
Presidential Graduate Fellowship Award	2006 – 2007
Summa Cum Laude, University Honors and Honors in Major	2006
Provost's Undergraduate Research Scholarship	2006
Academic Excellence Scholarship	2003 – 2006

PROFESSIONAL SERVICE AND ACTIVITIES

Member: American Economic Association; INFORMS; Economics Sciences Association; Society for Computational Economics; Southern Economic Association.

Referee: *Management Science; Journal of Public Economics; Journal of Economic Behavior & Organization; Economic Inquiry; Manufacturing & Service Operations Management; Production and Operations Management; Transportation Research Part F: Traffic Psychology and Behaviour; European Journal of Operations Research; Journal of Behavioral and Experimental Economics; Games and Economic Behavior; International Economic Review; Economic Theory; Scandinavian Journal of Economics; Operations Research, Journal of Risk and Uncertainty, The Review of Financial Studies, The Economic Journal, Experimental Economics, Journal of Economic Dynamics and Control, Journal of Economic Theory, Quantitative Economics, Review of Economic Studies*

Reviewer: National Science Foundation

Conferences and Workshops: Organizer of BSE Summer Forum Workshop on Computational and Experimental Economics (2023), Organizer of BESLAB Computational and Experimental Economics Summer School (2022, 2023), North American ESA Session Organizing Committee (2020)

TEACHING

Computational Economics (Ph.D., Undergrad., 2015 – present)
 Advanced Quantitative Economics with Python (Online MS Econ., 2022 – present)
 Quantitative Economics with Python (Online MS Econ., 2021 – present)
 Agent-based Computational Economics (Ph.D., 2017 – present)
 Game Theory (Undergrad., Executive MBA, 2017 – 2022)
 Computing for Analytics (MS BAIM, Weekend MBA, 2016 – 2019)
 Behavioral Economics (Undergrad., 2015 – 2016)
 Operations Management (Undergrad., 2014 – 2016)
 Introduction to Microeconomics (Undergrad., 2012)
 Introduction to Economics (Undergrad., 2012)

Workshops / Short Courses / Guest Lectures:

Reinforcement Learning (part of *Summer School on Computational and Experimental Economics* at BESLAB, Barcelona, Spain)
 Agent-based Modeling for Economics (part of *Computational Methods for Economists* summer course at EPFL, Lausanne, Switzerland)
 Reinforcement and Evolutionary Learning Models (part of *Computational Methods for Economists* summer course at EPFL, Lausanne, Switzerland)
 Learning in Economics Experiments (part of *IFREE Undergraduate Workshop* at Purdue, West Lafayette, Indiana)

STUDENT ADVISING

Dissertation Chair: Xinxin Lyu (in progress), Peter Wagner (2022, RWI Synthetics), Chen Wei (2021, Post-doc at Washington University of St. Louis)

Dissertation Committee Member: Jieqiong Jin (in progress), Alexander Marchal (in progress), Abhishek Kumar Umrawal (2023, UIUC), Maximilian Hofer (external committee member, 2022, Bain & Company), Richard Mickelsen (2022, Air Force), Mouli Modak (2022, Post-doc at Chapman University), William Brown (2021, Research Scientist at Afiniti), Vandith Pamuru (2020, Asst. Prof at Indian School of Business), Stanton Hudja (2020, Post-doc at Baylor), Heejong Lim (2016, Asst. Prof at University of Seoul), Huanren Zhang (2015, Post-doc at NYU-Abu Dhabi)

Field Examiner: Talha Cakir, Chen Wei, Pengcheng Yang, Peter Wagner

UNIVERSITY & DEPARTMENT SERVICE

Daniels School of Business curriculum committee (2022-present)
Board of Directors, Center for Behavioral Economics, Experiments, and Public Policy, Purdue University (2022-present)
Faculty advisor to Ukrainian Student Association (2021-present)
Economics undergraduate program committee (2019-present)
Economics department faculty search committee (2019-2023)
Business Analytics Ph.D. program committee (2022)
Faculty advisor to Purdue Economics Club (2019-2022)
Faculty representative to commencement (Dec 2015, Dec 2019)
Economics department seminar organizer (2013-2021)