# HANZHE ZHANG

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### **CURRENT AND PAST POSITIONS**

Assistant Professor of Economics, Michigan State University, East Lansing, MI, 08/2015-present.

Faculty Affiliate, Human Capital and Economic Opportunity Global Working Group, University of Chicago, Chicago, IL, 05/2016-present.

Inaugural Summer Scholar-in-Residence, Human Capital and Economic Opportunity Global Working Group, University of Chicago, Chicago, IL, 05/2016-08/2016.

Research Intern, Microsoft Research New England, Cambridge, MA, 06/2012-09/2012.

### RESEARCH AND TEACHING INTERESTS

Applied Microeconomic Theory: Matching Theory (Labor Economics and Family Economics) and Game Theory (Auctions, Bargaining, and Evolution).

#### PERSONAL INFORMATION

Born on February 17, 1990.

#### **EDUCATION**

PhD Economics, University of Chicago, 09/2010–06/2015.

PhD Thesis: "Essays in Matching, Auctions, and Evolution" under Gary Becker (co-advisor), Philip J. Reny (co-advisor), Pierre-André Chiappori, Scott Kominers, and Hugo Sonnenschein.

MA Math, BA Math with distinction, BA Economics with distinction (Shanbaum Prize for best senior), Statistics minor, University of Pennsylvania, *summa cum laude*, *Phi Beta Kappa*, 09/2007–05/2010.

MA Math Thesis: "Exposition of Two-Player Zero-Sum Poker Models" under Robin Pemantle (advisor) and Herman Gluck.

BA Economics Honors Thesis: "Deriving Valuations from Bidding Behaviors: British Third Generation Auction in 2000" under Kenneth Wolpin. (Lawrence Klein Prize for best undergraduate thesis)

### HONORS, GRANTS, AND FELLOWSHIPS

National Science Foundation IIS-1928278, "Intelligent Social Network Interventions to Augment Human Cognition for Bolstered Interdisciplinary Interactions in Project Teams" (\$1,439,993.00), Co-PI (with Sinem Mollaoglu, Richard DeShon, Kenneth Frank, and Jiliang Tang), 09/2019–08/2022.

Paul Van Arsdell Best Paper Award in Corporate Finance, Midwest Finance Association, 2020.

Best Paper Award in Markets and Institutions, Eastern Finance Association, 2019.

Provost Undergraduate Research Initiative Award, MSU, Su2016, F2016, F2017, S2018, Su2021.

Econometric Society Travel Grant, 2015.

University of Chicago Division of the Social Sciences Travel Grant, 2015.

Institute for Humane Studies Hayek Fund for Scholars, 2015.

The State of Sao Paulo Research Foundation Travel Grant, 2015.

University of Chicago Division of the Social Sciences Summer Grant, 2014.

Women and Leadership Archives Summer Research Grant, 2014.

Yahoo! Key Scientific Challenges Research Grant, one of thirty worldwide, 2012.

Frank H. Knight Fellowship, University of Chicago, 2010-2015.

Lawrence Klein Prize for best undergraduate economics thesis, University of Pennsylvania, 2010.

Shanbaum Prize for excellence in undergraduate economics, University of Pennsylvania, 2010.

Class of 1880 Prize, first place in freshman math competition, University of Pennsylvania, 2008.

## RESEARCH AND SCHOLARSHIP

## **Working Papers**

- 14. "Generating Tractable Cubic Production Functions" (with Scott Swinton), February 2021.
- 13. "Preference Evolution in Different Matching Markets" (with Jiabin Wu), January 2021.
- 12. "A Marriage-Market Perspective on Risk-Taking and Career Choices: Theory and Evidence" (with Ben Zou), August 2020.
- 11. "Polarization, Antipathy, and Political Activism" (with Jiabin Wu), August 2020.
- 10. "Overcoming Borrowing Stigma: The Design of Lending-of-Last-Resort Policies" (with Yunzhi Hu), June 2020. (Midwest Finance Paul Van Arsdell best paper; Eastern Finance best paper)

### **Peer-Reviewed Publications**

- 9. "Prices versus Auctions in Large Markets," *Economic Theory*, forthcoming (published online September 2020).
- 8. "An Investment-and-Marriage Model with Differential Fecundity: On the College Gender Gap," *Journal of Political Economy*, 129(5), forthcoming, May 2021.
- 7. "The Optimal Sequence of Prices and Auctions," *European Economic Review*, forthcoming, April 2021. [Extended abstract in *Proceedings of the 3rd Conference on Auctions, Market Mechanisms and Their Applications (AMMA '15)*, August 2015.] (Yahoo! Key Scientific Research Award)
- 6. "An Evolutionary Justification for Overconfidence" (with Kim Gannon), *Economics Bulletin*, 40(3), 2494–2504, September 2020. (University Undergraduate Research and Arts Forum best paper)
- 5. "Pre-Matching Gambles," *Games and Economic Behavior*, 121, 76–89, May 2020.
- 4. "To Risk or Not to Risk? Improving Financial Risk Taking of Older Adults by Online Social Information" (with Jason Chen Zhao, Wai-Tat Fu, Shengdong Zhao, and Henry Been-Lirn Duh), *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '15)*, 95–104, March 2015.
- 3. "Evolutionary Justifications for Non-Bayesian Beliefs," Economics Letters, 121, 198–201, November 2013.
- 2. "Two-Player Zero-Sum Poker Models with One and Two Rounds of Betting," *Penn Science*, 9(1), 27–30, Fall 2010.
- 1. "Cohort Profile: The China Jintan Child Cohort Study" (with Jianghong Liu, Linda McCauley, Yang Zhao, and Jennifer Pinto-Martin), *International Journal of Epidemiology*, 39(3), 668–674, June 2010.

# **Refereeing Activities**

Journals: American Economic Journal: Microeconomics, American Economic Review, American Economic Review: Insights, American Mathematical Monthly, Economic Theory, Games, Games and Economic Behavior, Information Systems Research, Journal of Economic Behavior and Organization, Journal of Evolutionary Economics, Journal of Political Economy, Oxford Economic Papers, Quantitative Economics, Theoretical Economics

Books: Open Textbook Network, W. W. Norton

Grants: National Science Foundation

#### **Seminar Presentations**

University of Texas at Austin, Theory Seminar, September 2019.

Johns Hopkins Carey Business School, Quantitative and Behavioral Economics Seminar, November 2018.

University of Oregon, Departmental Seminar, September 2018.

Cornell University, Joint Labor Economics and Public Economics Seminar, November 2017.

University of Nebraska at Lincoln, Departmental Seminar, March 2017.

University of Michigan, Theory Seminar, December 2016.

Boston College, Theory Seminar, April 2016.

McMaster University, Departmental Seminar, September 2015.

Michigan State University, Departmental Seminar, January 2015.

Queen's University, Departmental Seminar, January 2015.

Drexel University, Departmental Seminar, January 2015.

University of Wisconsin at Whitewater, November 2014.

### **Conference Presentations**

The Sixth World Congress of the Game Theory Society, Budapest, Hungary, July 2021.

Econometric Society World Congress, August 2020 (virtual).

Canadian Economic Theory Conference, May 2020 (virtual).

University of Michigan H2D2 Research Day, March 2020 (virtual).

American Economic Association Annual Meeting, San Diego, California, January 2020.

Presidential Session, Southern Economic Association Annual Meeting, Fort Lauderdale, November 2019.

Midwest Macroeconomics Meeting, East Lansing, Michigan, November 2019.

Midwest Theory Conference, St. Louis, Missouri, October 2019.

Stony Brook Game Theory Festival, Stony Brook, New York, July 2019.

CESIfo Summer Institute: Gender in the Developed and Developing World, Venice, Italy, June 2019.

Southern Economic Association Annual Meeting, Washington DC, November 2018.

Midwest Theory Conference, Nashville, Tennessee, October 2018.

University of Michigan H2D2 Research Day, Ann Arbor, Michigan, April 2018.

Midwest Economics Association and Society of Labor Economists Joint Session, Evanston, IL, March 2018.

Illinois Economic Association Annual Meeting, Chicago, Illinois, October 2017.

UM-MSU-UWO Labor Day Conference, University of Western Ontario, London, Canada, May 2017.

Population Association of America Annual Meeting, Chicago, Illinois, April 2017.

Midwest Theory Conference, Purdue University, West Lafayette, Indiana, December 2016.

Econometric Society European Winter Meeting, Milan, Italy, December 2015.

University of Michigan H2D2 Research Day, Ann Arbor, Michigan, December 2015.

Econometric Society World Congress, Montreal, Canada, August 2015.

Midwest Theory Conference, Ohio State University, Columbus, Ohio, April 2015.

American Economic Association Annual Meeting, Boston, Massachusetts, January 2015.

Illinois Economic Association Annual Meeting, Chicago, Illinois, October 2014.

Chicago-Northwestern Family Economics Day, Chicago, Illinois, September 2014.

Fields Institute Optimal Transportation and Equilibrium in Economics, Toronto, Canada, September 2014.

Stony Brook Game Theory Conference, Stony Brook, New York, July 2014.

Midwest Theory, Indiana University-Purdue University Indianapolis, Indianapolis, Indiana, April 2014.

American Economic Association Annual Meeting, San Diego, California, January 2014.

Chicago-Northwestern Market Design Workshop, Chicago, Illinois, October 2013.

Stony Brook Game Theory Conference, Stony Brook, New York, July 2013.

Econometric Society North American Winter Meeting, San Diego, California, January 2013.

Midwest Theory Conference, Washington University in St. Louis, St. Louis, Missouri, September 2012.

Stony Brook Game Theory Festival, Stony Brook, New York, July 2012.

First Workshop on Midwest Control and Game Theory, Urbana-Champaign, April 2012.

#### TEACHING AND LEARNING

### **Courses at MSU**

EC951 Research Seminars Advanced Topics II (graduate), S2017, S2022.

EC950 Research Seminars Advanced Topics I (graduate), F2016, F2021.

EC812B Microeconomics II (graduate), S2018, S2019, S2020, S2021, S2022.

EC401 Advanced Microeconomics (undergraduate), S2017, S2018.

EC301 Intermediate Microeconomics (undergraduate), F2015, S2017, S2018, S2019, S2020.

### **Guest Lectures**

EC911 Strategic Behavior in Economic Environment (graduate), Jon X. Eguia, MSU, F2016, S2019, S2021.

EC880 Labor Economics I (graduate), Ben Zou, MSU, Spring 2016, Fall 2016.

EC835 Public Expenditures (graduate), Stacy Dickert-Conlin, MSU, Fall 2016.

EC207 Honors Game Theory (undergraduate), Hugo Sonnenschein, UChicago, Fall 2012, Fall 2013.

EC244 Micro Theory in a Math Mode (undergraduate), Hugo Sonnenschein, UChicago, Fall 2012.

#### **Teaching Assistant**

BUSF421 Game Theory (MBA), Emir Kamenica, UChicago, Spring 2014.

ECON207 Honors Game Theory (undergraduate), Hugo Sonnenschein, UChicago, Fall 2012, Fall 2013.

ECON244 Micro Theory in a Math Mode (undergraduate), Hugo Sonnenschein, UChicago, Fall 2012.

ECON201 Honors Elements of Economic Analysis II (undergraduate), Glen Weyl, UChicago, Fall 2012.

ECON208 Theory of Auctions (undergraduate), Philip Reny, UChicago, Winter 2012.

### **SERVICE**

### **PhD Dissertation Committee**

Hasan Gokberk Bayhan, co-advisor, Construction Management and Economics, Fall 2020-present.

Katherine Zhou, committee member, Fall 2018–present.

Pallavi Pal, committee member (Stevens Institute of Technology Assistant Professor in 2020).

### **Graduate Mentoring**

Katherine Zhou, Directed Research Fellowship, Summer 2020.

Zijian Qi, third year paper committee member, February 2019.

Kaidi Wu, Directed Research Fellowship, Summer 2018.

Chris Fowler, Directed Research Fellowship, Summer 2017.

Quinton Baker, Directed Research Fellowship, Summer 2016.

### **Undergraduate Mentoring**

Alexander Fos, Provost Undergraduate Research Initiative, Su2021.

Evan Seyhun, Provost Undergraduate Research Initiative, Su2021.

Josephine A. Pelton, Econ Scholars, F2020-present.

Nicholas Butler, Honors College Professorial Assistantship program, F2020–S2022.

Ethan Pritchard, Honors College Professorial Assistantship program, F2019–S2021.

Hanshi Zuo, Honors College Professorial Assistantship program, F2018–S2020 (MSU CS master's in 2021).

Jack Mueller, Econ Scholars and Honors College Professorial Assistantship, F2018–S2021.

Lauren Nicole Swartz, Econ Scholars, F2018-S2020 (MSU marketing research master's in 2020).

Alexis Hollowell, Econ Scholars, F2017–S2019 (MSU human resource and labor relations master's in 2019).

Nicholas Anderson, Honors College Professorial Assistantship program, F2017–S2018.

Whitney Zhou, Econ Scholars and Provost Undergraduate Research Initiative, F2016-S2019.

Jacob Schmitter, Honors College Professorial Assistantship program, F2016-S2017.

Kim Gannon, Dean's Assistantship and PURI, Su2016–S2017 (J-PAL RA; Yale Public Health PhD).

# **External Undergraduate Mentoring**

Peiyi Jin, SWUFE, April 2019-Summer 2020 (National University of Singapore economics PhD in 2020).

Suo Shi, University of Wisconsin, Summer 2019 (Cambridge economics MPhil in 2019).

Yue Li, Nankai University, Summer 2018–Spring 2019 (Oxford economics MPhil in 2019).

Dongming Yu, University of Michigan, August 2017-August 2018 (MSU economics PhD in 2018).

Eileen Fang, Peking University, Summer 2016 (USC economics PhD in 2017).

## **Organization**

Co-founder, Theory Reading Group, Michigan State University, 09/2019-present.

Organizer, Theory/Macro Brown Bag, Michigan State University, 09/2015-present.

Member, Graduate Admissions and Awards Committee, Michigan State University, F2020-S2022.

Chair, Qualifying Exam Committee, Michigan State University, 05/2020.

Member, Qualifying Exam Committee, Michigan State University, 08/2016, 05/2018, 08/2019.

Member, Extended Advisory Committee, Michigan State University, 06/2019.

Member, Departmental Computer Committee, Michigan State University, 09/2016–05/2017.

Organizer, Economic Theory Seminar, Michigan State University, 09/2016-05/2017.

Member, Advisory Committee, Michigan State University, 09/2015–08/2016.

Organizer, Economic Theory Working Group, University of Chicago, 01/2013-06/2015.

Co-founder, Chicago Chinese Social Research Group, 09/2013–06/2015.

Co-founder, Market Design Reading Group, University of Chicago, 04/2012–06/2015.

Committee member, Kravis Award for Outstanding Undergraduate Teaching, Penn, 2010.

### **General Audience Presentations and Media Mentions**

"How Do People Pair Up?," MSU Science Festival, April 2021.

"MSU Receives \$1.2M NSF Grant to Study Intelligent Social Network Interventions." featured on SPDC (December 2019) and MSU Today (January 2020).

"Three Questions with Hanzhe Zhang," June 2016.

"HCEO Announces First Summer Scholar-in-Residence," May 2016.

The Game of Life: Understanding Education and Marriage with Game Theory, March 2015.

"Expose Yourself!: Endless LOVE," February 2014.