## John J. Horton



### Bio

I am an economist and the Richard S. Leghorn (1939) Career Development Professor at the MIT Sloan School of Management and a Faculty Research Fellow at the NBER. My research is primarily focused on issues in information systems, market design, labor economics and organizational economics, particularly in the context of online markets. I am also interested in the effects of AI on labor markets and the potential of AI to improve social science methodology. Twitter: @johnjhoron

## **Academic Employment**

Associate Professor (with Tenure), MIT Sloan School of Management, 2023-Present

Richard S. Leghorn Career Development Associate Professor, MIT Sloan School of Management, 2020-2023

Assistant Professor, MIT Sloan School of Management, 2019-2020

Assistant Professor of Information Systems, Stern School of Business, New York University, 2013-2019

## Research

#### Automated social science: Language models as scientist and subject

(with <u>Kehang Zhu</u> and <u>Benjamin Manning</u>)

- Versions: (<u>arxiv</u>)(<u>nber</u>)
- Status: Working paper
- Links: Citations: (gs)

## Large language models as economic agents: what can we learn from homo silicus?

- Versions: (jjh)(arxiv)
- Status: R&R at Review of Economics and Statistics
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>) Twitter Thread(s): (<u>1</u>)

#### The death of a technical skill

(with <u>Prasanna Tambe</u>)

- Versions: (jjh)
- Status: Forthcoming at Information Systems Research
- Links: Citations: (gs) Media: (Quartz) Slides: (1) Twitter Thread(s): (1)

#### Algorithmic writing assistance on jobseekers resumes increases hires

(with Emma Wiles and Zanele Munyikwa)

- Versions: (jjh)(nber)(arxiv)
- Status: Forthcoming at Management Science
- Links: Citations: (gs) Media: (MarketWatch)(Business Insider)(The Observer)(Quartz) Slides: (1)(2)

## Price floors and employer preferences: evidence from a minimum wage experiment

- Versions: (jjh)
- Status: American Economic Review
- Links: Citations: (gs) Media: (<u>The New York Times</u>)(<u>Bloomberg View</u>)(<u>Wall Street Journal</u>) Videos: (<u>1</u>) Slides: (<u>1</u>)(<u>2</u>)

# Job-seekers send too many applications: experimental evidence and a partial solution

(with Shoshana Vasserman)

- Versions: (jjh)
- Status: Working paper
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>)

#### The tragedy of your upstairs neighbors

(with <u>Apostolos Filippas</u>)

- Versions: (<u>ssrn</u>)(<u>arxiv</u>)(<u>acmec</u>)
- Status: R&R at Journal of Public Economics
- Links: Citations: (gs) Media: (The Guardian) Videos: (1) Slides: (1)

## Consumer demand with social influences: evidence from an e-commerce platform

(with Chiara Farronato and El Hadi Caoui)

- Versions: (<u>nber</u>)
- Status: Forthcoming Management Science
- Links: Citations: (gs) Media: (HBS Working Knowledge)

#### Information about vacancy congestion redirects job search

(with Andrey Fradkin and Monica Bhole)

- Versions: (jjh)
- Status: Forthcoming, Management Science
- Links: Citations: (gs)

## Labor allocation in paid crowdsourcing: experimental evidence on positioning, nudges and prices

(with Dana Chandler)

- Versions: (jjh)
- Status: HCOMP
- Links: Citations: (gs) Slides: (1)

#### Covid-19 and remote work: an early look at us data

(with Adam Ozimek, Daniel Rock, Erik Brynjolfsson, Garima Sharma and Hong-Yi TuYe)

- Versions: (nber)
- Status: Working paper
- Links: Citations: (<u>gs</u>) Replication: (<u>1</u>)

#### Buyer signaling improves matching: evidence from a field experiment

(with Philipp Kircher and Ramesh Johari)

- Versions: (<u>nber</u>)
- Status: Working paper
- Links: Citations: (<u>gs</u>) Videos: (<u>1</u>) Slides: (<u>1</u>)

#### Wielding peer effects in online production: evidence from a series of field experiments

(with Richard Zeckhauser)

- Status: Working paper
- Links: Citations: (gs)

#### The ruble collapse in an online marketplace: some lessons for market designers

- Versions: (jjh)
- Status: R&R, Journal of Labor Economics
- Links: Citations: (gs) Slides: (1)

#### The production and consumption of social media

(with <u>Apostolos Filippas</u> and <u>Elliot Lipnowski</u>)

- Versions: (jjh)(nber)
- Status: R&R, Management Science
- Links: Citations: (<u>gs</u>) Videos: (<u>1</u>) Slides: (<u>1</u>)(<u>2</u>)

#### Ride-sharing markets re-equilibrate

(with Dan Knoepfle and Jonathan Hall)

- Versions: (jjh)(uber blog)
- Status: R&R, Journal of Economics and Management Strategy
- Links: Citations: (gs) Media: (<u>Wall Street Journal</u>)(<u>Quartz</u>)(<u>AP News</u>)(<u>None</u>) Videos: (<u>1</u>) Slides: (<u>1</u>)

#### Steering in online markets: the role of platform incentives and credibility

(with Moshe Barach and Joseph Golden)

- Versions: (jjh)(mansci)(nber)
- Status: Management Science
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>)

#### The future of crowd work

- Versions: (stanford)
- Status: ACM-CSCW 2013
- Links: Citations: (gs)

#### The effects of algorithmic labor market recommendations: evidence from a field experiment

- Versions: (jjh)(jole)
- Status: Journal of Labor Economics
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>)

#### Digital labor markets and global talent flows

(with Christopher Stanton and William Kerr)

Versions: (<u>nber</u>)

- Status: Book Chapter
- Links: Citations: (gs)

#### The dot-guessing game: a 'fruit fly'for human computation research

- Versions: (jjh)
- Status: Working paper
- Links: Citations: (gs)

#### Head in the clouds: challenges and opportunities in crowdsourcing

- Status: ACM Crossroads
- Links: Citations: (gs)

#### Reputation inflation

(with Apostolos Filippas and Joseph Golden)

- Versions: (jjh)(mktscience)(nber)(acmec)(repec)(ssrn)
- Status: Marketing Science
- Links: Citations: (gs) Media: (Financial Times)(Quartz)(Fortune)(EurekAlert) Videos: (1) Slides: (1)

#### Labor economists get their microscope: big data and labor market analysis

(with <u>Prasanna Tambe</u>)

- Versions: (jjh)
- Status: Big Data
- Links: Citations: (gs)

#### Online labor markets

- Versions: (jjh)
- Status: WINE
- Links: Citations: (gs) Replication: (1)

#### The online laboratory: conducting experiments in a real labor market

(with David Rand and Richard Zeckhauser)

- Versions: (<u>expecon</u>)(<u>nber</u>)(<u>harvard</u>)
- Status: Experimental Economics
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>) Replication: (<u>1</u>)

#### The labor economics of paid crowdsourcing

(with Lydia Chilton)

- Versions: (jjh)
- Status: ACM-EC
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>) Replication: (<u>1</u>)

#### Designing incentives for inexpert raters

(with <u>Daniel Chen</u> and <u>Aaron Shaw</u>)

- Versions: (jjh)(acm)
- Status: ACM-CSCW 2011
- Links: Citations: (<u>gs</u>) Replication: (<u>1</u>)

### Buyer uncertainty about seller capacity: causes, consequences, and a partial solution

- Versions: (jjh)(mansci)(ssrn)
- Status: Management Science
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>)(<u>2</u>) Twitter Thread(s): (<u>1</u>)

#### The effects of search advertising on competitors: an experiment before a merger

(with Joseph Golden)

- Versions: (jjh)(mansci)
- Status: Management Science
- Links: Citations: (gs) Media: (Freakanomics Radio) Slides: (1)

#### Owning, using and renting: some simple economics of the sharing economy

(with Apostolos Filippas and Richard Zeckhauser)

- Versions: (<u>mansci</u>)(<u>mit</u>)(<u>nber</u>)
- Status: Management Science
- Links: Citations: (<u>gs</u>) Media: (<u>The Washington Post</u>) Slides: (<u>1</u>)(<u>2</u>) Replication: (<u>1</u>)

#### Are online labor markets spot markets for tasks?

(with Daniel Chen)

- Versions: (jjh)
- Status: Information Systems Research
- Links: Citations: (<u>gs</u>) Replication: (<u>1</u>)

#### The need for standardization in crowdsourcing

#### (with Panos Ipeirotis)

- Versions: (jjh)
- Status: Proceedings of the workshop on crowdsourcing and human computation at CHI
- Links: Citations: (gs)

#### Task search in a human computation market

(with Lydia Chilton, Robert Miller and Shiri Azenkot)

- Versions: (jjh)(acm)
- Status: HCOMP 2010
- Links: Citations: (<u>gs</u>) Slides: (<u>1</u>) Replication: (<u>1</u>)

#### The condition of the turking class: are online employers fair and honest?

- Versions: (jjh)
- Status: Economic Letters
- Links: Citations: (<u>gs</u>) Replication: (<u>1</u>)

## How do employers use compensation history: evidence from a field experiment

(with Moshe Barach)

- Versions: (jole)
- Status: Journal of Labor Economics
- Links: Citations: (g) Media: (<u>The New York Times</u>)(<u>MarketWatch</u>) Slides: (1)

## Awards

INFORMS ISS Cluster Best Paper Award, Runner-up (Production & Consumption of Social Media), 2022 Conference on Artificial Intelligence, Machine Learning, and Business Analytics, AI/ML "Rising Star" Award, 2021, 2021 ISS Sandra A. Slaughter Early Career Award, 2021, 2021 Experimental Economics, Editor's Award Winner for 2011, 2011 Becker-Friedman Center on Price Theory, Summer Camp, University of Chicago, 2010, 2010 NSF-IGERT Multidisciplinary Fellowship in Inequality and Social Policy, 2008 - 2010, 2008 Institute for Humane Studies Graduate Fellowship, 2009, 2009 National Science Foundation Graduate Research Fellowship, Honorable Mention, 2008, 2008 Bronze Star Medal, 2004 Army Acheivement Medal (for budgeting & spreadsheet work), 2005 Army Commendation Medal, 2004

### Grants

Basic Parachutist Badge, 1999

['grant: Microsoft Research', 'year: 2023']

['grant: Schwartzman College of Computing Grant - "Using AI Agents to Simulate Social Scenarios", 'year: 2023']

['grant: Upjohn Institute, Early Career Award Grant, 2016', 'year: 2016']

['grant: Lab for Economic Applications and Policy, Harvard University, Research Grant, 2010', 'year: 2010']

['grant: Institute for Quantitative Social Science, Harvard University, Travel Grant, 2010', 'year: 2010']

['grant: Amazon Research Grant, Web Services, 2010', 'year: 2010']

['grant: Berkman Center for Internet and Society, Harvard Law School, Research Grant, 2009', 'year: 2009']

## Talks

CMU Workforce and Technology Mini-Conference (scheduled), 2024 HBS Technology, Operations and Management Seminar (scheduled), 2024 Behavioral Approaches to Financial Decision Making Conference, 2024 UC Berkeley - Econ Seminar (scheduled), 2024 ACM-EC 2024, 2024 NBER Summer Institute, Economics of IT and Digitization, 2024 Strategy Group, Harvard Business School , 2024 Paris Economics of Digitization seminar (remote), 2024

#### Stanford GSB - Marketing, 2024

Workshop on the Economics of Social Media, SSRC, 2023

NBER Summer Institute - Personnel Economics, 2023

NBER Summer Insitute - Industrial Organization & Digitzation, 2023

SERC Panel at MIT, 2023

Paris Economics of Digitization seminar (invited but declined for health reasons), 2023

Walmart Economics Team, 2023

LinkedIn - Tech Talk, 2023

Yale Economics - Labor and Public Seminar (invited), 2023

Microsoft Research New England - EconCS Seminar, 2023 University of Nottingham - Centre for Decision Research and Experimental Economics, 2023 Tsinghua-HKUST DEEP Seminar, 2023 Hong Kong University, 2023 Workshop on Information Systems and Economics (2 papers), 2022 Singapore Management University, 2022 Toronto Rotman Strategy Seminar, 2022 Boston University - Information Systems, 2022 Purdue, 2022 UC Irvine, 2022 Keynote Address, 2021 Conference on AI, ML and Business Analytics, 2021 GMU Economics Seminar, 2021 UMD Economics Seminar, 2021 Council of Economic Advisors, 2021 University of Bocconi, 2021 Frankfurt School of Finance and Management, 2021 Mannheim Unversity, 2021 Columbia Business School, Management Dept., 2021 CESifo panel, "Firm-Academic Research Collaborations in Economics", 2021 Keynote Address, 3rd Crowdworking Symposium, 2021 Digital Economics Seminar (video), 2021 Toulouse Seminar in Platform Economics, 2021 NBER Labor Studies Meeting, 2021 MIT Org econ Seminar (remote), 2020 MIT Sloan, TIES Group (remote), 2020 University of Washington - Olin School of Business (remote), 2020 CMU Heinz School, 2020 University of Chicago, Booth School of Business, 2019 Stanford University Economics Dept. Labor Seminar, 2019 Temple University, Big Data & Mobile Analytics Workshop, 2018 Keynote speaker, IZA Workshop on 'Matching Workers and Jobs Online', 2018 Society of Labor Economists Annual Meeting (Toronto), 2018 Kellogg School at Northwestern (invited seminar; declined for health reasons (broken foot)), 2018

Booth School, University of Chicago (invited seminar; declined for scheduling reasons), 2018

Princeton CITP (invited seminar), 2018

Columbia Business School (invited seminar; declined - health), 2018

17th ZEW Conference on Economics of Information & Communications Technology, 2018

NBER Summer Institute (3 papers - 2 at IT & Digitization, 1 at Labor Studies), 2018

MIT Economics Dept (invited seminar), 2018

Stanford SIEPR (invited seminar; declined due to scheduling reasons), 2018

AEA Annual Meeting (two papers), 2018

Workshop at MIT on AI, Cities and the Future of Work, 2017

"Field Days" at University of Copenhagen, 2017 Advances in Field Experiments, University of Chicago, 2017 Platform Strategy at BU, 2017 15th ZEW Conference on Economics of Information & Communications Technology, 2017 NBER Summer Institute (Economics of Digitization - 2 papers), 2017 Federal Communications Commission (turned down), 2017 ASU Information Systems Workshop, 2017 Temple University, 2017 HBS Entrepreneurial Management Unit, 2017 AEA Annual Meeting, "Inequality in the Evolving Labor Market", 2017 Speaker, Collective Intelligence, NYU Stern, 2016 Sharing Economy Symposium, Keynote Speaker, University of Minnesota, 2016 SOLE/EALE Conference, Seattle, 2016 Creativity and Innovation Research Initiative (CIRI), NYU Stern, 2016 The On-Demand Economy Conference, MIT Sloan, 2016 Frontiers in Digital Data, HBS, 2016 AEA Annual Meeting, Organizer: "The Economics of Peer-to-Peer Markets", 2016 WIN Conference (conference presentation), 2015 INFORMS, "Empirical Market Design", 2015 NBER Productivity & Innovation, 2015 CMU, Tepper School of Business, Business and Technology, Bus. & Society, 2015 eBay Research, 2015 Facebook Data Science, 2015 Uber Technologies, 2015 NBER Summer Institute, Economics of IT and Digitization, 2015 ACM-Electronic Commerce, Portland, 2015 SOLE/EALE Conference, Montreal, 2015 13th ZEW Conference on the Economics of Information & Communications Technology, 2015 Chapman University, ESI/IFREE Lecture, 2015 CODE (Conference on Digital Experimentation), 2015 Microsoft Research, NYC, 2015 Texas A&M - MEER Conference, 2015

Texas A&M University, Economics Dept, Economic Theory & Experimentation Seminar, 2015

UMN, Carlson School of Management, Work & Organizations Dept. Seminar, 2015

AEA Annual Meeting, "Empirical Market Design", 2015

Carnegie Mellon University, School of Computing, 2015

MIT Sloan, Operations Management Seminar, 2014

NBER Summer Institute 2014, Economics of IT and Digitization, 2014

University of Chicago, Harris School, Public Policy and Economics Seminar, 2014

University of Nuremburg, 2014

Xiamen University, International Symposium on Contemporary Labor Economics, 2013

INSEAD, Technology and Operations Management Seminar, 2013

MIT Roundtable on the Digital Economy, 2013

SOLE/EALE, Society of Labor Economics Annual Meeting, 2013

The Bernard L. Schwartz Globalization Initiative at SAIS Distinguished Lecture Series, Johns Hopkins University, November 2012, 2012

Experimental Economics Lunch Seminar, University of Chicago, 2011

Networked Business Seminar, Harvard Business School, 2011

Neural Information Processing Systems (NIPS) 24th Annual Conference, Vancouver, British Columbia, Invited Speaker on "Social Science and the Wisdom of Crowds," December 2010, 2010

The 6th Workshop on Internet and Network Economics (WINE 2010), Stanford University, 2010

Christakis Lab Group Seminar Series, Harvard Medical School, November 2010, 2010

CrowdConf 2010, San Francisco, CA, October 2010, 2010

Advances with Field Experiments, Wharton School of Business, University of Pennsylvania,, 2010

Crowdsourcing Applications Seminar, University of Massachusetts, 2010

European Association of Labour Economists (EALE) / Society of Labor Economists (SOLE) 3rd International Conference, University College London, June 2010, 2010

ACM-Conference on Electronic Commerce (ACM-EC), Cambridge, MA, 2010

EconCS Seminar, Harvard School of Engineering and Applied Science, 2010

SJDM Annual Conference, Boston, MA, 2009

## **Education**

PhD, Harvard University

BS, United States Military Academy at West Point

file:///Users/john/tools/johnjosephhorton.github.io/index.html