

SARAH H. BANA

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Professional Appointments

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|-------------------|---|
| 08/2022 - Present | Assistant Professor of Management Science, Chapman University |
| 08/2022 - Present | Digital Fellow, Stanford Digital Economy Lab |
| 07/2020 - 08/2022 | Postdoctoral Fellow, Stanford Digital Economy Lab (part of the Stanford Institute for Human-Centered Artificial Intelligence) |
| 06/2019 - 06/2020 | Postdoctoral Associate, MIT Initiative on the Digital Economy |

Education

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| Ph.D. | Economics, University of California, Santa Barbara, 2019 |
| M.A. | Economics, University of California, Santa Barbara, 2014 |
| M.A. | Applied Economics, Georgetown University, 2013 |
| B.A. | Quantitative Economics, University of California, Irvine, 2010 |

Peer-Reviewed Publications

Bana, Sarah H., Brynjolfsson, Erik, Jin, Wang, Steffen, Sebastian, & Wang, Xiupeng. (2025) "Human Capital Acquisition in Response to Data Breaches." *MIS Quarterly*, 49, 1, 367-388. <https://doi.org/10.25300/MISQ/2024/18352>

Javadian Sabet, Alireza, Bana, Sarah H., Yu, Renzhe, & Frank, Morgan R. (2024) "Course-Skill Atlas: A National Longitudinal Dataset of Skills Taught in U.S. Higher Education Curricula." *Scientific Data*, 11, 1086. <https://doi.org/10.1038/s41597-024-03931-8>

Bana, Sarah, Bedard, Kelly, Rossin-Slater, Maya, & Stearns, Jenna. (2023). "Unequal Use of Social Insurance Benefits: The Role of Employers." *Journal of Econometrics*, 233, 633-660. <https://doi.org/10.1016/j.jeconom.2022.02.008>

Kim, Hung Chau, Bana, Sarah H., Bouvier, Baptiste, & Frank, Morgan F. (2023). "Connecting Higher Education to Career Skills." *PLoS One*, 8(3): e0282323. <https://doi.org/10.1371/journal.pone.0282323>

Bana, Sarah H., Bedard, Kelly, & Rossin-Slater, Maya. (2020). "The Impacts of Paid Family Leave Benefits: Regression Kink Evidence from California Administrative Data." *Journal of Policy Analysis and Management*, 39, 888-929. <https://doi.org/10.1002/pam.22242>

Peer-Reviewed Conference Proceedings

Toups, Connor, Bommasani, Rishi, Creel, Kathleen, Bana, Sarah H., Jurafsky, Dan, & Liang, Percy. (2023). "Ecosystem-level Analysis of Deployed Machine Learning Reveals Homogeneous Outcomes." In *Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS 2023)*.

Other Publications and Writings

Bana, Sarah H., Seth G. Benzell, and Rodrigo Razo Solares. 2020. "Ranking How National Economies Adapt to Remote Work." *Sloan Management Review*.

- *Media Coverage*: BBC Business Daily: Homeworking's winners and losers, Valor Economico: Brasil é o quinto país com maior dificuldade para o home office

Bana, Sarah, Kelly Bedard, and Maya Rossin-Slater. 2018. "Trends and Disparities in Leave Use under California's Paid Family Leave Program: New Evidence from Administrative Data." *AEA Papers & Proceedings*, 108: 388-91.

Working Papers

Beyond Code: The Multidimensional Impacts of Large Language Models in Software Development with Sardar Fatooreh Bonabi, Tingting Nian, and Vijay Gurbaxani (in preparation for submission)

- *Media Coverage*: New York Times

AI-Enabled Job Markets & Market Participation: How AI Shapes Jobseekers' Expectations of Competition with Kevin Boudreau (under review at *MIS Quarterly*)

Hiring Algorithms in Practice: Bias and Homogeneity with Rishi Bommasani, Kathleen A. Creel, Connor Toups, Dan Jurafsky, and Percy Liang (in preparation for submission)

Fighting Fire with Fire: Infusing AI into Peer Review to Sustain Quality Scholarship with Hemant Bhargava, Laura Brandimarte, VC Choudhary, J. Frank Li, Pantelis Loupos, Daniel Zantedeschi, and Zhe Zhang (under review at *Management Science*)

AI-Exposed Jobs Deteriorated Before ChatGPT with Morgan R. Frank, Alireza Javadian Sabet, Lisa Simon, and Renzhe Yu (under review at *Science*)

work2vec: Using Language Models to Understand Wage Premia

Estimating the Cost of Advance Notice for Firms Conducting Mass Layoffs with Jacob Morris

work2vec: Learning a Representation of Jobs with Erik Brynjolfsson, Daniel Rock, and Sebastian Steffen

Identifying Vulnerable Displaced Workers: The Role of State-Level Occupation Conditions

- *Media Coverage*: Wall Street Journal – Real Time Economics Blog

Fellowships and Awards

Research Awards – Chapman

2025 Argyros College of Business and Economics Research Award

Research Awards – External

- 2025 Upjohn Institute Early Career Research Award – \$7,500
- 2022 Russell Sage Foundation Presidential Grant (co-PI with Morgan Frank)
- 2019 Honorable Mention, Upjohn Institute Dissertation Award
- 2017 \$10,000 award from the Workforce Data Initiative at the University of Chicago’s Center for Data Science and Public Policy (funded by the Alfred P. Sloan Foundation)

Research Awards – Stanford

- 2022 Stanford Institute for Human-Centered AI Google Cloud Credits – \$62,000
- 2021 Stanford Institute for Human-Centered AI Google Cloud Credits – \$100,000

Research Awards – UC Santa Barbara

- 2018 Division of Social Sciences Fellowship
- 2017 Professor Robert T. Deacon Graduate Fellowship in Economics
- 2013 Economics Department Block Grant Fellowship

Teaching Awards – UC Santa Barbara

- 2018 UCSB Economics Outstanding Teaching Assistant of the Quarter (for Fall 2017 – Introduction to Econometrics)

Travel Grants – UC Santa Barbara

- 2018 UCSB Academic Senate Doctoral Student Travel Grant
- 2017 UCSB Economics Graduate Student Travel Grant
- 2016 Dean’s Grant for ICPSR Training

Conference Presentations

- Workshop on Information Systems and Economics – Nashville, TN (December 2025)
- OpenAI Economic Research Conference – San Francisco, CA (December 2025)
- New Platforms and Technologies for Matching Workers to Jobs – Pittsburgh, PA (October 2025)
- INFORMS – Atlanta, GA (October 2025)
- People and Organizations – Philadelphia, PA (September 2025)
- Statistical Challenges in Electronic Commerce Research (SCECR) – Paphos, Cyprus (June 2025)
- AI and the Future of Work – Philadelphia, PA (May 2025)
- Workshop on Information Systems and Economics – Bangkok, Thailand (December 2024)
- Southern Economics Association – Washington, DC (November 2024)
- SCECR – Lisbon, Portugal (June 2024)
- AI and the Future of Work – Philadelphia, PA (May 2024)
- Non-Market Effects of Market Power – New York, NY (May 2024)
- Higher Skills: How Can Higher Education Meet the Ever-Evolving Needs of the Labor Market? – Ann Arbor, MI (October 2023)

Conference on Information Systems and Technology – Phoenix, AZ (October 2023)
5th Monash-Warwick-Zurich Text-as-Data Workshop – Virtual (April 2023)
American Economic Association (AEA) Meetings – New Orleans, LA (January 2023)
Workshop on Information Systems and Economics – Copenhagen, Denmark (December 2022)
INFORMS Annual Meeting – Indianapolis, IN (October 2022)
Workshop on the Economics of Information Security – Tulsa, OK (June 2022)
Labor and Employment Relations (LERA) Annual Meeting (June 2022, virtual)
AEA Meetings – Boston, MA (January 2022, virtual)
4th IDSC of IZA Workshop: Matching Workers and Jobs Online - New Developments and Opportunities for Social Science and Practice (October 2021, virtual)
WEAI Annual Conference – Honolulu, HI (June 2021, virtual)
Society of Labor Economists (SOLE) Conference – Philadelphia, PA (May 2021, virtual)
Northeast Labor Symposium for Early Career Economists – Princeton, NJ (April 2021, virtual)
Workshop on Information Systems and Economics – Hyderabad, India (December 2020, virtual)
Southern Economics Association (SEA) – New Orleans, LA (November 2020, virtual)
Stanford Digital Economy Lab Workshop – Stanford, CA (October 2020, virtual)
EALE/SOLE/AASLE World Conference – Berlin, Germany (June 2020, virtual)
The Past, Present and Future of Work Conference (HKS) – Cambridge, MA (May 2020, virtual)
WEAI Annual Conference – San Francisco, CA (July 2019)
Society of Labor Economists (SOLE) Conference – Arlington, VA (May 2019)
DFG Conference on Technology, Demographics and the Labor Market – Cologne, Germany (March 2019)
Southern Economic Association Conference – Washington, DC (November 2018)
WEAI Graduate Student Workshop – Vancouver, BC (June 2018)
APPAM Regional Student Conference – Washington, DC (May 2018)
WEAI Annual Conference – San Diego, CA (June 2017)
Society of Labor Economists (SOLE) Conference – Raleigh, NC (May 2017)

Poster Presentations

All California Labor Economics Conference – University of Southern California (October 2018)
Summer School on Socioeconomic Inequality – University of Chicago (July 2016)

Invited Academic Seminars

Academic Year 2024-2025

University of California – Irvine, California State University – Long Beach

Academic Year 2023-2024

Case Western Reserve University, University of Queensland, University of San Francisco

Academic Year 2022-2023

University of Arizona, University of Pittsburgh

Academic Year 2021-2022

Federal Reserve Bank of Philadelphia, Federal Reserve Board, Federal Reserve Bank of Minneapolis – Opportunity & Inclusive Growth Institute, University of Texas – Dallas, United States Air Force Academy, Simon Fraser University, Boston University, Emory University, American University, University of Minnesota, Council of Economic Advisers, Stanford Institute for Human-Centered AI, University of California – Santa Barbara (Labor Lunch), University of Nevada – Reno, Chapman University, MIT Initiative on the Digital Economy, Stanford Digital Economy Lab

Academic Year 2020-2021

Bureau of Labor Statistics Data Science Users Group, University of Nebraska – Lincoln

Academic Year 2019-2020

MIT Initiative on the Digital Economy, Harvard Kennedy School Growth Lab, University of Massachusetts – Lowell

Academic Year 2018-2019

University of Memphis, RAND Corporation, U.S. Census Bureau, Bureau of Labor Statistics, Colby College, Carleton University

Other Invited Presentations

Academic Year 2025-2026

U.S. Census Bureau Local Employment Dynamics (Keynote), Chapman University AI Impact Summit (Panelist)

Academic Year 2024-2025

AI Forward Alliance side event at the Commission on the Status of Women (Panelist)

Academic Year 2023-2024

aIMPACT Davis (Panelist)

Academic Year 2022-2023

Stanford AI & Society Workshop (Panelist), National Association for State Workforce Agencies (NASWA) Summit 2022, Korean Academic Society of Business Administration Symposium (Panelist)

Academic Year 2021-2022

HAI Spring Conference on Key Advances in Artificial Intelligence (Panelist – Foundation Models), Stanford Digital Economy Lab Workshop on AI & the Future of Work (Research Talk), Stanford Technology Law Review and Stanford Law & Policy Review Symposium on Fairness and Transparency in AI (Panelist – AI and Employment)

Academic Year 2019-2020

California State Assembly Rising Tide Policy Summit (Panelist – What is at Risk? How will our Workforce Change in the Next Generation?)

Teaching Experience

Chapman University

MGSC 220: Foundations of Business Analytics, ECON 452: Introduction to Econometrics

Mentor – MIT Sloan

15.572 Analytics Lab: Action Learning Seminar on Analytics, Machine Learning, and the Digital Economy

Instructor of Record – University of California, Santa Barbara

Economics 140A: Introduction to Econometrics

Teaching Assistant – University of California, Santa Barbara

Economics 140B: Introduction to Econometrics, Economics 140A: Introduction to Econometrics, Economics 10A: Microeconomic Theory, Economics 1: Principles of Microeconomics

Workshop Participation and Organization

AI Challenges Education Workshop Organizer (2025, 2026)

Association for Information Systems (AIS) Digital Transformation, Innovation and Entrepreneurship (DITE) Paper Development Workshop Participant (2024)

IT Teaching Workshop (2022, 2023)

MISQ Scholarly Development Academy Participant (2022)

Technology and Innovation Management Junior Faculty Consortium Participant (at AOM 2020)

MIT 6.S191 Introduction to Deep Learning (2020)

6th Lindau Meeting on Economic Sciences (funded by the National Science Foundation) (2017)

ICPSR Workshop on Machine Learning: Applications and Opportunities in the Social Sciences (2017)

NBER Economics of Digitization Graduate Student Tutorial (2016, 2017)

Summer School on Socioeconomic Inequality at the University of Chicago (2016)

Research Assistant Experience

Research assistant for Prof. Heather Royer (2014-2017)

Research assistant for Prof. Shelly Lundberg (2015)

Research assistant at the RAND Corporation (2010-2013)

Service to the University

Center for Excellence in Teaching and Learning (CETL) Faculty Associate (Fall 2025 - Spring 2026)

- Presenter at CETL January Symposium – Choose Your Own AI-Venture: Engage, Explore, Experiment

Member – Graduate Committee, Argyros College of Business and Economics (Fall 2024 - Present)

Member – Hiring Committee, Argyros College of Business and Economics (Fall 2024 - Spring 2025)

Organizer – Chapman Summer IS Workshop (July 2024)

Service to the Profession

Founder/maintainer of @Econ_RA, a Twitter account that posts Economics RA job postings (Fall 2018 - Fall 2024)

Program Committee – Conference on Information Systems and Technology (CIST) 2026
2023 Management Science Meritorious Service Award

Referee Service:

National Science Foundation Reviewer

Information Systems: *Management Science*, *Information Systems Research (ISR)*, *MIS Quarterly*, *International Conference on Information Systems (ICIS)*, *Conference on Information Systems and Technology (CIST)*, *Workshop on the Economics of Information Security (WEIS)*.

Economics: *American Economic Review*, *Quarterly Journal of Economics*, *American Economic Journal: Economic Policy*, *Review of Economics and Statistics*, *Journal of the European Economic Association (JEEA)*, *Journal of Labor Economics*, *Labour Economics*, *ILR Review*, *Journal of Human Resources*, *Journal of Econometrics*, *Journal of Public Economics*.

Other: *Organization Science*, *Proceedings of the National Academy of Sciences (PNAS)*, *Journal of Policy Analysis and Management (JPAM)*, *Demography*, *Health Affairs*.

Other Peer-Reviewed Work

Fisher, M. P., Ramchand, R., Bana, S., & Iguchi, M. Y. (2013). Risk behaviors among HIV-positive gay and bisexual men at party-oriented vacations. *Journal of Studies on Alcohol and Drugs*, 74(1), 158-167.

Other Press

MIT Sloan Ideas Made to Matter - What happens to industry and employment after COVID-19?

Volunteer Work

Working Wardrobes (Orange County) Volunteer (2022-2024)

Various roles with Aga Khan Education Board for the United States