Stanford

Melissa Valentine

Associate Professor of Management Science and Engineering and Senior Fellow at the Stanford Institute for Human-Centered AI

CONTACT INFORMATION

- **Administrator**

  Jenny Lam - Administrative Associate

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Bio

BIO

Professor Melissa Valentine is a tenured Associate Professor in the Department of Management Science and Engineering at Stanford University and a Senior Fellow at the Stanford Institute for Human-Centered Artificial Intelligence (HAI). Her research focuses on how emerging technologies, including artificial intelligence and algorithms, are transforming work and organizations. Her studies examine topics such as flash teams, AI-powered organizations, algorithmic management, and the development of new algorithmic capabilities in organizations.

As a Senior Fellow at Stanford HAI, Professor Valentine advances interdisciplinary research on the intersection of AI and organizational design. Her scholarship has earned numerous accolades, including the NSF CAREER Award and multiple best paper awards from leading management and HCI conferences. Her work has been published in premier journals such as Organization Science, Management Science, and Administrative Science Quarterly, and is frequently featured in outlets like The New York Times, The Wall Street Journal, Harvard Business Review, and Wired.

Professor Valentine earned her bachelor's degree from Stanford University, her master's degree from New York University, and her Ph.D. from Harvard University. A sought-after collaborator and mentor, she has co-advised numerous award-winning doctoral theses and continues to contribute to the academic community through her innovative research and teaching.

ACADEMIC APPOINTMENTS

- Associate Professor, Management Science and Engineering
- Senior Fellow, Institute for Human-Centered Artificial Intelligence (HAI)

HONORS AND AWARDS

- Prose Category Winner in Business, Finance, and Management (Flash Teams), Association of American Publishers (2026)
- USA Today National Bestseller (Flash Teams), USA Today (2025)
- Best Paper Award, Communication, Technology, and Organization Division, Academy of Management (2022)
- Paul Pigott Faculty Scholar, Stanford School of Engineering (2021)
- Teaching Honor Roll, Tau Beta Pi engineering honor society (2020)
- CAREER Award, National Science Foundation (2019)

- Best Paper Award, SIGCHI Conference on Human Factors in Computing Systems (2017)
- Graduate Teaching Award, Stanford Management Science & Engineering (2015)
- Hellman Faculty Scholar, Stanford University (2014)
- Winner, Dissertation Competition, INFORMS/Organization Science (2012)
- Wyss Award for Excellence in Doctoral Research, Harvard Business School (2013)
- Outstanding Paper with Practical Implications, Academy of Management (2012)
- Susan Cohen Award for Doctoral Research, Center for Effective Organizations (2010)

LINKS

- Faculty web site: https://melissavalentine.co
- Google Scholar Profile: https://scholar.google.com/citations?user=yulZTtMAAAAJ&hl=en

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

As societies develop and adopt new technologies, they fundamentally change how work is organized. The intertwined relationship between technology and organizing has played out time and again, and scholars predict that new internet and data analytic technologies will spur disruptive transformations to work and organizing.

These changes are already well-documented in the construction of new market arrangements by companies such as Upwork and TaskRabbit, which defined new categories of “gig workers.” Yet less is known about how internet and data analytic technologies are transforming the design of large, complex organizations, which confront and solve much different coordination problems than gig platform companies.

Questions related to the structuring of work in bureaucratic organizations have been explored for over a century in the industrial engineering and organizational design fields. Some of these concepts are now so commonplace as to be taken for granted. Yet there was a time when researchers, workers, managers, and policymakers defined and constructed concepts including jobs, careers, teams, managers, or functions.

My research program argues that some of these fundamental concepts need to be revisited in light of advances in internet and data analytic technologies, which are changing how work is divided and integrated in organizations and broader societies. I study how our prior notions of jobs, teams, departments, and bureaucracy itself are evolving in the age of crowdsourcing, algorithms, and increasing technical specialization. In particular, my research is untangling how data analytic technologies and hyper-specialization shape the division and integration of labor in complex, collaborative production efforts characteristic of organizations.

Teaching

COURSES

2025-26

- Contemporary Themes in Work and Organization Studies: MS&E 388 (Spr)
- Managing Data Science Organizations for Innovation and Impact: MS&E 284 (Win)
- The Future of Work: What Will it Mean to Build AI-Augmented Organizations?: MS&E 184 (Spr)

2024-25

- Contemporary Themes in Work and Organization Studies: MS&E 388 (Aut)

- Managing Data Science Organizations for Innovation and Impact: MS&E 284 (Win)
- Navigating an Academic Career: Topics for PhD Students: MS&E 380 (Aut)
- The Future of Work: What Will it Mean to Build AI-Augmented Organizations?: MS&E 184 (Aut)

2023-24

- Contemporary Themes in Work and Organization Studies: MS&E 388 (Aut)
- Flash Teams: Theory and Practice: MS&E 184 (Aut)
- Managing Data Science Organizations for Innovation and Impact: MS&E 284 (Win)

STANFORD ADVISEES

Doctoral Dissertation Advisor (AC)

Adrienne Baer, Amanda Pratt

Master's Program Advisor

Divya Agarwal, Jenna Bowsher, Michelle Buyan, Jillian Chang, Alexandra Collins, Trent DiCicco, Fabiola Duran Juache, Rishab Gupta, Hannah Lee, Francesco Marchioni, Kirsti McEnroe, Ayo Odeyinde, Jimmy Rogers, Hiya Shah

Doctoral (Program)

Chris Dylewski, Martin Jose Gonzalez, Ramesh Manian, Liem Nguyen

Publications

PUBLICATIONS

- **When an AI "Agentforce" enters the workforce: generative AI, employment relations, and the changing social contract** *JOURNAL OF ORGANIZATION DESIGN*
  Valentine, M.
  2025
- **The Algorithm and the Org Chart: How Algorithms Can Conflict with Organizational Structures** *PROCEEDINGS OF THE ACM ON HUMAN COMPUTER INTERACTION*
  Valentine, M. A., Pratt, A. L., Hinds, R., Bernstein, M. S.
  2024; 8 (CSCW2)
- **Legitimating Illegitimate Practices: How Data Analysts Compromised Their Standards to Promote Quantification** *ORGANIZATION SCIENCE*
  Stice-Lusvardi, R., Hinds, P. J., Valentine, M.
  2023
- **ALGORITHMS AT WORK: THE NEW CONTESTED TERRAIN OF CONTROL** *ACADEMY OF MANAGEMENT ANNALS*
  Kellogg, K. C., Valentine, M. A., Christin, A.
  2020; 14 (1): 366–410
- **Virtually Even: Status Equalizing in Distributed Organizations** *ORGANIZATION SCIENCE*
  Hinds, R., Valentine, M., Decelles, K., Berg, J. M.
  2025
- **Constructing a Classification Scheme-and its Consequences A Field Study of Learning to Label Data for Computer Vision in a Hospital Intensive Care Unit** *PROCEEDINGS OF THE ACM ON HUMAN COMPUTER INTERACTION*
  Valentine, M. A., Bohn, R. E., Pratt, A. L., Jain, P., Singer, S. J., Bernstein, M. S.
  2024; 8 (CSCW2)
- **Who Pays the Cancer Tax? Patients' Narratives in a Movement to Reduce Their Invisible Work** *ORGANIZATION SCIENCE*
  Valentine, M. A., Asch, S. M., Ahn, E.
  2022

- **Learning in Temporary Teams: The Varying Effects of Partner Exposure by Team Member Role** *ORGANIZATION SCIENCE*
  Kim, S., Song, H., Valentine, M. A.
  2022
- **Aligning Differences: Discursive Diversity and Team Performance** *MANAGEMENT SCIENCE*
  Lix, K., Goldberg, A., Srivastava, S. B., Valentine, M. A.
  2022
- **How Managers Maintain Control Through Collaborative Repair: Evidence from Platform-Mediated "Gigs"** *ORGANIZATION SCIENCE*
  Rahman, H. A., Valentine, M. A.
  2021; 32 (5): 1300-1326
- **"This Seems to Work": Designing Technological Systems with The Algorithmic Imaginations of Those Who Labor**
  Cameron, L., Christin, A., DeVito, M., Dillahunt, T. R., Elish, M., Gray, M., Qadri, R., Raval, N., Valentine, M., Watkins, E., ACM ASSOC COMPUTING MACHINERY.2021
- **Beyond Satisfaction Scores: Exploring Emotionally Adverse Patient Experiences** *AMERICAN JOURNAL OF MANAGED CARE*
  Holdsworth, L. M., Zionts, D. L., De Sola-Smith, K., Valentine, M., Winget, M. D., Asch, S. M.
  2019; 25 (5): E145–E152
- **Fluid Teams and Knowledge Retrieval: Scaling Service Operations** *M&SOM-MANUFACTURING & SERVICE OPERATIONS MANAGEMENT*
  Valentine, M. A., Tan, T., Staats, B. R., Edmondson, A. C.
  2019; 21 (2): 346–60
- **WHEN EQUITY SEEMS UNFAIR: THE ROLE OF JUSTICE ENFORCEABILITY IN TEMPORARY TEAM COORDINATION** *ACADEMY OF MANAGEMENT JOURNAL*
  Valentine, M.
  2018; 61 (6): 2081–2105
- **Inpatient Hospital Factors and Resident Time With Patients and Families** *PEDIATRICS*
  Destino, L. A., Valentine, M., Sheikhi, F. H., Starmer, A. J., Landrigan, C. P., Sanders, L.
  2017; 139 (5)
- **Renegotiating Spheres of Obligation: The Role of Hierarchy in Organizational Learning** *ADMINISTRATIVE SCIENCE QUARTERLY*
  Valentine, M.
  2017
- **Team Scaffolds: How Mesolevel Structures Enable Role-Based Coordination in Temporary Groups** *ORGANIZATION SCIENCE*
  Valentine, M. A., Edmondson, A. C.
  2015; 26 (2): 405-422
- **Measuring Teamwork in Health Care Settings: A Review of Survey Instruments.** *Medical Care*
  Valentine, M. A., Nembhard, I. M., Edmondson, A. C.
  2015; 53 (4): e16-e30
- **Expert crowdsourcing with flash teams** *ACM User Interface Software and Technology Symposium*
  Retelny, D., Robaszkiewisz, S., To, A., Lasecki, W., Patel , J., Rahmati, N., Doshi, T., Valentine, M., Bernstein, M.
  2014: 75–85
- **Flash Organizations: Crowdsourcing Complex Work by Structuring Crowds As Organizations**
  Valentine, M., Retelny, D., To, A., Rahmati, N., Doshi, T., Bernstein, M.
  2017