




## Melissa Valentine

Associate Professor of Management Science and Engineering

 Curriculum Vitae available Online

### CONTACT INFORMATION

- **Administrator**

Jenny Lam - Administrative Associate

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### Bio

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#### BIO

Professor Melissa (Mav) Valentine is an Associate Professor at Stanford University in the Management Science and Engineering Department. Prof Valentine studies how technology is changing work and organizations. Recent studies include how experts can develop new capabilities and expertise using algorithms and how managers can use AI and algorithms to design and manage flash teams. Recently tenured, Prof Valentine spent her Sabbatical year as the inaugural Sabbatical Scholar at Stanford Institute for Human-Centered Artificial Intelligence. She and collaborators have received best paper awards for research in both management and HCI conferences. Her work has been covered in the New York Times, The Wall Street Journal, Harvard Business Review, Wired, Fast Company, and The Financial Times. Prof Valentine holds a bachelor's degree from Stanford University, a master's degree from NYU, and a Ph.D. from Harvard University. She was recognized with an NSF CAREER award in 2019.

#### ACADEMIC APPOINTMENTS

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

#### HONORS AND AWARDS

- 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

- mav Google Scholar: <https://scholar.google.com/citations?user=yulZTtMAAAAJ&hl=en>
- Center for Work, Technology, and Organization: <https://wto.stanford.edu/>

## Research & Scholarship

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### 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

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### COURSES

#### 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)

#### 2021-22

- Contemporary Themes in Work and Organization Studies: MS&E 388 (Spr)
- Data Science of Organizations: MS&E 284 (Spr)
- Future of Work: Issues in Organizational Learning and Design: MS&E 184 (Spr)

#### 2020-21

- Future of Work: Issues in Organizational Learning and Design: MS&E 184 (Spr)

### STANFORD ADVISEES

#### Doctoral Dissertation Advisor (AC)

Adrienne Baer

#### Master's Program Advisor

Divya Agarwal, Hannah Lee, Joyce Lin, Tracy Ly, Ian MacKinnon, Finn Mallery, Francesco Marchioni, Adhara Martellini, Ayo Odeyinde, Jackson Painter, Montanna Riggs, Hiya Shah, Emma Thygesen, Sidong Wang, Stone Yang, Zoe von Gerlach

**Doctoral Dissertation Co-Advisor (AC)**

Ryan Stice-Lusvardi

**Doctoral (Program)**

Nicholas Okafor, Amanda Pratt

## Publications

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### PUBLICATIONS

- **Legitimizing Illegitimate Practices: How Data Analysts Compromised Their Standards to Promote Quantification** *ORGANIZATION SCIENCE*  
Stice-Lusvardi, R., Hinds, P. J., Valentine, M.  
2023
- **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
- **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
- **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
- **"This Seems to Work": Designing Technological Systems with The Algorithmic Imaginations of Those Who Labor**  
Cameron, L., Christin, A., DeVito, M., Dillahun, 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., Zions, 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., Robaszkiewicz, 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