# Marta Stelmaszak Rosa

## **Assistant Professor of Information Systems**

Isenberg School of Management, University of Massachusetts Amherst

#### mstelmaszak@isenberg.umass.edu

Date: 28 July 2024

### PROFILE

As an Assistant Professor of Information Systems at the Isenberg School of Management at the University of Massachusetts Amherst, my key research interests concern data science and analytics, and their responsible,

sustainable, and socially just management in organizations. My research program is geared towards information systems and management journals. I am committed to multidisciplinary teaching and keen to explore developing competencies needed for managers to work with data and analytics. I serve as a reviewer for top journals and conferences in the field, and regularly organize and volunteer at workshops and events. Both my research and teaching benefit from past experience as an entrepreneur in e-learning and IT.

### EDUCATION

PhD in Information Systems, London School of Economics and Political Science, 2015-2019 Doctoral Thesis: "Big data analytics and organisational change. The case of learning analytics", supervisor: Prof. Jannis Kallinikos.

#### MSc in Data Science, Birkbeck, University of London, 2018-2020

Dissertation: "What makes a good answer? Good question... Investigating the characteristics of quality answers on Community Question Answering sites".

**PGCert in Higher Education, London School of Economics and Political Science**, 2017-2018 Full Certificate and Fellowship of the Higher Education Academy.

# MSc in Management, Information Systems and Innovation, London School of Economics and Political Science, 2013-2014

Dissertation: "Self-employment and technology: paradoxes shaping the digital freelance environment", supervisor: Prof. Carsten Sørensen.

#### BA in Applied Translation, London Metropolitan University, 2009-2012

Completed a bachelor's degree with a first-class classification.

## PROFESSIONAL RESEARCH EXPERIENCE

Assistant Professor of Information Systems, Isenberg School of Management, University of Massachusetts Amherst, 2024-now

Daimler Truck Professor of Analytics, School of Business, Portland State University, 2022-2024

Assistant Professor of Information Systems, School of Business, Portland State University, 2021-2024

## PUBLISHED RESEARCH

Stelmaszak, M., Möhlmann, M. & Sørensen, C. (2024) Distributed Delegation Between Human and IS

Agents on a Multi-Sided Platform: The Case of Uber. Forthcoming in: *MIS Quarterly*. Impact factor: 5.430, ABS Guide: 4\*

**Stelmaszak**, M., Wagner, E. & Nixon DuPont, N. (2024) Recognition in Personal Data: Data Warping, Recognition Concessions, and Social Justice. Forthcoming in: *MIS Quarterly*. Special Issue on *Digital Technologies and Social Justice*. <u>https://doi.org/10.25300/MISQ/2023/18088</u>. Impact factor: 5.430, ABS Guide: 4\*

Constantiou, I., Joshi, M. and **Stelmaszak**, M. (editors) (2024) *Research Handbook on Artificial Intelligence and Decision Making in Organizations*. Cheltenham: Edward Elgar Publishing. <u>https://www.e-elgar.com/shop/usd/research-handbook-on-artificial-intelligence-and-decision-making-in-organizations-9781803926209.html</u>.

Aaltonen, A. & **Stelmaszak**, M. (listed alphabetically, equal contribution) (2023) Performing Trace Data in Knowledge Work. *Information Systems Research*. <u>https://pubsonline.informs.org/doi/10.1287/isre.2019.0357</u>. Impact factor: 2.457, ABS Guide: 4\*

Constantiou, I., Joshi, M. & **Stelmaszak**, M. (listed alphabetically, equal contribution) (2023). Organizations as Digital Enactment Systems: A Theory of Replacement of Humans by Digital Technologies in Organizational Scanning, Interpretation and Learning. *Journal of the Association for Information Systems*. Special Issue on *Envisioning Digital Transformation: Advancing Theoretical Diversity*, *24*(6), 1459-1478. <u>https://aisel.aisnet.org/jais/vol24/iss6/1/.</u> Impact factor: 3.103, ABS Guide: 4\*

Aaltonen, A., Alaimo, C., Parmiggiani, E., **Stelmaszak**, M. & Jarvenpaa, S., Kallinikos, J., Monteiro, E. (listed alphabetically, equal contribution) (2023). Inaugural Workshop on Data Research: What is Missing from Research on Data in Information Systems? *Communications of the Association for Information Systems*, *53*(1). <u>https://aisel.aisnet.org/cais/vol53/iss1/17</u>. Impact factor: 2.384, ABS Guide: 2

**Stelmaszak**, M. & Parry, G. (2023) Data are in the Eye of the Beholder: Co-Creation for Sustainable Personal Data Value. *Strategic Change*. Special Issue on *Resilience*, *Sustainability*, *and Identity in the Digital Age*, *32*(6), 175-182. <u>https://onlinelibrary.wiley.com/doi/10.1002/jsc.2556</u>. ABS Guide: 2\*

**Stelmaszak**, M., & Kline, K. (2023). Managing Embedded Data Science Teams for Success: How Managers Can Navigate the Advantages and Challenges of Distributed Data Science. *Harvard Data Science Review*, *5*(2). <u>https://doi.org/10.1162/99608f92.1f068331</u>

#### PAPERS UNDER REVIEW

**Stelmaszak**, M., Joshi, M. & Constantiou, I. (listed in reverse alphabetical order, equal contribution) Artificial Intelligence Beyond Humanism: Toward a New Paradigm for Theorizing AI in Organizations. Under review in: *Journal of Management Studies*. Special Issue on *Artificial Intelligence: Organizational Possibilities and Pitfalls*. Impact factor: 9.72, ABS Guide: 4, revise and resubmit

**Stelmaszak**, M., Wyers, K., Masiero, S., Aaltonen, A. & Wagner, E. Fuzzy Data Objects: Representing Gender Identity in Information Systems in a Data-made World. Under review in: *Information and Organization*. Impact factor: 6.300, ABS Guide: 3, revise and resubmit

Hopf, K., Joshi, M., Shollo, A., **Stelmaszak**, M. Data Scientists as Craftworkers: Toward a Configuration of Data-Based Craft in the Digital Age. Under review in: *Research in the Sociology of Organizations*, revise and resubmit

**Stelmaszak**, M. Citational Justice for Diversity, Equity, and Inclusion in Information Systems Research? Under review in: *Information Systems Research*. Impact factor: 2.457, ABS Guide: 4\*

**Stelmaszak**, M. & Parmiggiani, E. Data Under Construction: Balancing Concretizing and Generifying Anticipation in Digital Data Design. Under review in: *Journal of the Association for Information Systems*. Impact factor: 3.103, ABS Guide: 4\*

**Stelmaszak**, M., Lebovitz, S. & Wagner, E. From data to change: Transforming organizational structures through social issue data design. Under review in: *Administrative Science Quarterly.* Impact factor: 7.31, ABS Guide: A\*, data analysis

**Stelmaszak**, M., Pingley, S., Wagner, E., Lebovitz, S. Managing Information Systems for Social Justice Projects: Recommendations for IS Project Managers. Under review in: *Information Systems Journal*. Special Issue on *Information Systems in and for Practice*. Impact factor: 4.267, ABS Guide: 4

#### WORK IN PROGRESS

Aaltonen, A. & Stelmaszak, M. Data Innovation Lens: A New Way to Approach Data Design as Value Creation. Under development for: Information Systems Research. Impact factor: 2.457, ABS Guide: 4\*

**Stelmaszak**, M., Lebovitz, S. & Wagner, E. The Seesaw of Visibility: How Organizations Struggle for Dignity when Managing the Visibility of Personal Data. Under development for: *Information and Organization*. Impact factor: 6.300, ABS Guide: 3, data analysis

**Stelmaszak**, M., Lebovitz, S., & Wagner, E. From Data About Things to Data About People: Charting a Responsible Approach to Personal Data in Organizations. Under development for: *Information Systems Research*. Impact factor: 2.457, ABS Guide: 4\*

**Stelmaszak**, M. Mode Switching Between Intentional Planning and Attentional Sensing in Data Science. Under development for: *Information and Organization*. Impact factor: 6.300, ABS Guide: 3, conceptualization Aaltonen, A., Lyytinen, K., & **Stelmaszak**, M. Research Handbook on Digital Data: Interdisciplinary Perspectives. Edward Elgar Publishing.

## SELECT CONFERENCE PROCEEDINGS, PRESENTATIONS, PANELS

**Stelmaszak**, M., Aikath, D., & Mayer, A-S. "They work with data and do some science": How Identity Conflict Turns Professionals Away from Data Science. *International Conference on Information Systems 2023,* 10-13 December 2023.

**Stelmaszak**, M. Panel Symposium, Algorithmic Bias and Data Injustice: Dark Side or Dark Matter? 83<sup>rd</sup> Academy of Management Meeting, 4-8 August 2023, Boston, USA.

**Stelmaszak**, M. & Wagner, E. (2023) <u>Teaching Case Study: Gender Data Trouble in a Student Information</u> <u>System</u>. *Hawaii International Conference on System Sciences 2023*, 3-6 January 2023.

**Stelmaszak**, M. & Wagner, E. (2022) <u>What Flows Through Data Infrastructures: Blockages, Bends, and</u> <u>Bottlenecks in Sharing Gender Data Between Institutions</u>. *International Conference on Information Systems* 2022, 12-15 December 2022.

**Stelmaszak**, M. Behavioral Visibility through Analytics: How Organizations Construct Actionable Insight. 82nd Academy of Management Meeting, 5-9 August 2022, Seattle, USA.

Möhlmann, M. & **Stelmaszak**, M. Professional Development Workshop: Studying Algorithms and Management: Reflections on Data, Methods, and Theory. *82nd Academy of Management Meeting*, 5-9 August 2022, Seattle, USA.

**Stelmaszak**, M. (2022) <u>Inside a Data Science Team: Data Crafting in Generating Strategic Value from</u> <u>Analytics</u>. *European Conference on Information Systems 2022,* 18-24 June 2022.

**Stelmaszak**, M. (2021) <u>How To Train Your Algo: Investigating the Enablers of Bias in Algorithmic</u> <u>Development</u>. *International Conference on Information Systems 2021*, *12-15 December 2021*.

**Stelmaszak**, M. (2021) <u>Unboxing the Algorithm: A Process Model of an Algorithmic Solution</u>. *Americas Conference on Information Systems 2021*, 9-13 August 2021.

**Stelmaszak**, M. & Parry, G. (2021) <u>Data are in the Eye of the Beholder: Co-creating the Value of Personal</u> <u>Data</u>. *Hawaii International Conference on System Sciences 2020*, 5-8 January 2021.

**Stelmaszak**, M. & Aaltonen, A. (2018) <u>Closing the Loop of Big Data Analytics: the Case of Learning</u> <u>Analytics</u>. *European Conference on Information Systems 2018*, 23-28 June 2018, Portsmouth, UK.

**Stelmaszak**, M. & Aaltonen, A. (2018) <u>Toward a Bidirectional View of Causality in Big Data Analytics: The</u> <u>Case of Learning Analytics</u>. *Academy of Management Global Proceedings*, Vol. Surrey, No. 2018.

## **OTHER PUBLICATIONS**

• Harvard Business Review, "Creating a technology-driven DEI ecosystem to bridge the gap between DEI efforts and real change", forthcoming, with Tarafdar, M.

.....

- Edward Elgar Publishing, "Research Handbook on Artificial Intelligence and Decision Making in Organizations", forthcoming in 2024, with Constantiou, I., Joshi, M.
- Ivey Publishing, "Teaching Case: Personal Pronouns versus Information Systems", with Wagner, E.
- Communications of the Association for Information Systems, 53(1), "<u>Inaugural Workshop on Data</u> <u>Research: What is Missing from Research on Data in Information Systems?</u>", 2023, with Aaltonen, A., Alaimo, C., Parmiggiani, E., Jarvenpaa, S., Kallinikos, J., Monteiro, E.
- LSE Business Review, "As firms collect their data, employees learn to game the system", 2020 with Aaltonen, A.
- LSE Research in Focus, "Big Data Analytics Change Modern Organisations from Within", 2019
- Management with Impact, "The more you measure, the more they will game you", 2019 with Aaltonen, A.
- · LSE Business Review, "Working in the cloud means working all the time", 2016
- LSE Impact of Social Sciences Blog, "When data science meets social sciences: the benefits of the data revolution are clear but careful consideration is needed", 2017 with Hukal, P.

## **TEACHING EXPERIENCE**

.....

**Instructor:** Business Intelligence and Analytics (University of Massachusetts Amherst, undergraduate), Solving Business Problems with Analytics and Visualization, Information Literacy (Portland State University, undergraduate), Social Computing, Data and Information Service, Global Strategy Management and Information Systems (London School of Economics, graduate) Emerging Technology Review, Technology Strategy, Business Environment (University College London, graduate)

**Course Designer:** Solving Business Problems with Analytics and Visualization (MS Excel, Tableau), Business Analytics with Programming (Python), Systems Analysis and Design, Database Management (SQL) (Portland State University)

## Additional Experience

Honorary Lecturer, Technology Management Group, University College London, 2020-now LSE Fellow in Management, London School of Economics and Political Science, 2019-2020 Course Designer, International Programmes, LSE, University of London, 2017-2020 Associate Examiner, International Programmes, LSE, University of London, 2016-now

## **GRANTS AND AWARDS**

- Best Associate Editor Award, European Conference on Information Systems 2023
- Nominated for Best Paper Award at HICSS 2023 in Organizational Systems and Technology Track
- Daimler Truck Professorship of Analytics, USD 25,000 award per year
- Faculty Development Grant, USD 14,000 to support a research project on "Gender in Data: Queerying the principles of database design in information systems research", Portland State University
- Scholarly Engagement Grant, USD 4,000 to support research, Portland State University
- Best Reviewer Award for track AI in Business and Society, International Conference on Information Systems 2021
- Research Fellow at the Digital Transformations Platform, Copenhagen Business School, 2021
- Scholarly Engagement Grant, USD 3,500 to support a research project, Portland State University
- Nominated for Best Paper Award at HICSS 2021 in Decision Analytics and Service Science Track
- Top 10 lecturers and class teachers in Lent Term 2020, Department of Management, London School of Economics and Political Science
- Knowledge Exchange and Impact, 2019, London School of Economics and Political Science. Awarded a £2,000 grant to organize an event to disseminate research outputs with non-academic audiences
- Nominated for the Excellent Personal Tutoring Award as part of Student Choice Awards at University College London, 2019
- Summer of Student Innovation, 2016, Jisc. Awarded a £5,000 grant to develop an augmented reality mapping application for university campuses
- · Selected as part of McKinsey's Next Generation Women Leaders 2016
- PhD Studentship 2015-2019, London School of Economics and Political Science. Awarded a highlyselective and competitive full scholarship and stipend for the duration of the PhD program
- Higher Education Social Entrepreneurship Award, 2012. Awarded a £3,000 grant to start a communityinterest company in the communication sector

## **INVITED TALKS**

- UK Academy for Information Systems, 27 September 2023: Organizations as Digital Enactment Systems: A Theory of Replacement of Humans by Digital Technologies in Organizational Scanning, Interpretation, and Learning.
- Alliance Manchester Business School, 6 June 2023: The Seesaw of Visibility: How Organizations Struggle for Dignity when Managing the Visibility of Personal Data.
- DataConnect West, 23 March 2023: Humans and AI: Redistributing Intelligence for Business Value.
- Digital Markets Competition Forum, 27 April 2022: Unpacking the inner workings of a platform: How do
  algorithms and data shape competition among participants?
- Copenhagen Business School, 2 December 2021: Panel debate: How can AI interact with humans during decision-making in organizations?
- Digital Tech Summit, 1 December 2021: Behind the scenes of datawork: how valuable data are created in organizations.
- University of Exeter Business School, 5 March 2020: Big data, analytics and the rise of con-figuration work.
- Royal Holloway University, 4 March 2020: Big data, analytics and the rise of con-figuration work.
- UK Department for Education, 14 May 2019: Big data analytics in education: promises, myths and challenges.

• Loughborough University, 6 March 2019: Big data analytics and organizational change: transforming business school teaching through learning analytics.

# EDITORIAL DUTIES

Early Career Researcher Editorial Board Member, Journal of Strategic Information Systems, 2022-2024 Associate Editor, Academy of Management Annual Meeting, 2022 Associate Editor, International Conference on Information Systems, 2021-present Associate Editor, European Conference on Information Systems, 2023 Reviewer, Journal of Management Studies, 2023 Reviewer, Journal of the Association of Information Systems, 2023 Reviewer, Information Systems Research, 2022 Reviewer, Information Technology for Development, 2022 Reviewer, Journal of Strategic Information Systems, 2021, 2022 Reviewer, Information Systems Journal, 2021, 2022 Reviewer, Information Systems Journal, 2021, 2022 Reviewer, Academy of Management Annual Meeting, 2018, 2019 Reviewer, Journal of Information Technology, 2018

# **PROFESSIONAL MEMBERSHIPS**

Academic Membership of the Association for Information Systems Academic Membership of the Academy of Management Fellowship of the Higher Education Academy

### SERVICE

.....

• Faculty Council Secretary, School of Business, Portland State University, 2023

- Participant, Inclusive Pedagogy and Curricular Innovation Group, Portland State University, 2023
- Member of the Search Committee for the Assistant Professor of Business Technology and Analytics, School of Business, Portland State University, 2022, 2023
- Member of the Scholarship Committee, School of Business, Portland State University, 2022, 2023
- Organizer of Inaugural Online Workshop on Data Research, 10 March 2022
- Member of the Research Committee, School of Business, Portland State University, 2021, 2022
- Member of the Search Committee for the Instructor of Business Technology and Analytics, School of Business, Portland State University, 2021

### PROFESSIONAL INDUSTRY EXPERIENCE

Board Member, Chartered Institute of Linguists, 2017-2020

Involved in governance and strategy at the Institute, contributing to the formulation of strategic goals, governance and financial objectives. Received training in strategy, finance and governance for trustees and directors of non-for-profit organizations.

#### Director of Platform Development, eCPD, 2014-2017

Joined the team at eCPD, a UK-based online education company, as a director responsible for platform management, tasked with streamlining and improving processes (e.g., move to automated payments and invoicing cutting 40% of labor cost) and moving to a new online platform (refocusing on selling videos as products, sales up by 70% within the first year). Company was subsequently acquired by a UK-based membership organization.