

Curriculum Vitae

Dr. Stephanie Kelley

Assistant Professor, Operations Management
Ivey Business School, The University of Western Ontario

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EDUCATION

- 2017 – 2022 **Ph.D., Management Analytics**
Smith School of Business, Queen's University
Thesis title: Understanding and Preventing Artificial Intelligence
Ethics Challenges in Financial Services Organizations
Supervisors: Dr. Yuri Levin & Dr. Anton Ovchinnikov
- 2017 **Masters of Management Analytics (MMA)**
Smith School of Business, Queen's University
- 2012 **Bachelor of Commerce (with Honours)**
Smith School of Business, Queen's University
- 2011 *Exchange Program: University of Strathclyde, Glasgow, Scotland*

PEER-REVIEWED PUBLICATIONS

Kelley, S., Ovchinnikov, A., Haroon, D., Heinrich, A. (2022) Antidiscrimination Laws, AI, and Gender Bias: A Case Study in Nonmortgage Fintech Lending. *Manufacturing & Service Operations Management*, Special Issue on Responsible Research. 24(6):2797-3306

Popular press articles about this publication:

- Removing Demographic Data Can Make AI Discrimination Worse, *Harvard Business Review*, March 6 2023
- AI Bias: When Antidiscrimination Laws Turn Sour, *Smith Business Insight*, June 28, 2022

Publication awards and recognition:

- International Research Centre on Artificial Intelligence under the auspices of UNESCO 2022-2023 Top 100 AI solutions for reaching the 17 SDGs
- Semi-finalist in the 2022 MSOM Responsible Operations competition

Kelley, S. (2022) Employee Perceptions of the Effective Adoption of AI Principles. *Journal of Business Ethics*, Special Issue on Business Ethics in the Era of Artificial Intelligence. (178): 871-893

Popular press articles about this publication:

- The Route to Trusted AI: What the financial services sector can teach us about preparing for the age artificial intelligence. *Smith Business Insight*, May 12, 2021

WORKS IN PROGRESS

Kelley, S., Schiff, D., Camacho Ibanez, J., Ayling, J. The State of First and Second-party AI Ethics Audits: Perceptions of Auditors in Practice. In Preparation for Journal of Business Ethics

Kelley, S., Ovchinnikov, A., Ramolete, G.I., Sureshbabu, K.K., Heinrich, A. Tailoring Explainable Artificial Intelligence: User Preferences and Profitability Implications for Firms.

Jenkin, T., **Kelley, S.**, Ovchinnikov, A., Ying, C. Explanation Seeking and Recommendation Adherence in Human-to-Human versus Human-to-Artificial Intelligence Interactions.

INVITED CONFERENCE PRESENTATIONS (*presenter)

Jenkin, T., **Kelley, S.***, Ovchinnikov, A., Ying, C. (2023, October) Explanation Seeking and Recommendation Adherence in Human-to-Human versus Human-to-Artificial Intelligence Interactions. Scheduled to Present at the INFORMS 2023 Annual Meeting, Phoenix, AZ, US.

Jenkin, T., **Kelley, S.**, Ovchinnikov, A., Ying, C*. (2023, June) Explanation Seeking and Recommendation Adherence in Human-to-Human versus Human-to-Artificial Intelligence Interactions. Scheduled to Present at the 16th Annual Behavioural Operations Management Conference, Baltimore, MD, US.

Kelley, S.*, Ovchinnikov, A., Heinrich, A (2022, December) *Tailoring Explainable Artificial Intelligence in Practice*. Presented at the 2022 Conference on Artificial Intelligence, Machine Learning, and Business Analytics, Harvard Business School, Boston, MA, US.

Kelley, S.*, Ovchinnikov, A., Heinrich, A (2022, November) *Using Analytics to Develop Explainable Artificial Intelligence Solutions for Lenders*. Presented at the 2022 Decision Sciences Institute Annual Conference, Houston, TX, US.

Kelley, S.* & Ovchinnikov, A. (2022, October) *Explainable AI for Employees: Loan Officer Preferences and Profitability Implications for Firms*. Presented at the INFORMS 2022 Annual Meeting, Indianapolis, IN, US.

Kelley, S.* & Ovchinnikov, A. (2021, November) *Anti-Discrimination Law, AI, and Gender Bias: A Case Study in Non-Mortgage Fintech Lending*. Presented at the 2021 Decision Sciences Institute Annual Conference (Virtual).

Kelley, S.* (2021, August) *Effective Adoption and Implementation of AI Principles*. Presented at the 2021 Academy of Management Annual Meeting (Virtual), Technology Innovation Management Section.

Kelley, S.* & Ovchinnikov, A. (2021, June) *Anti-Discrimination Law, AI, and Gender Bias: A Case Study in Non-Mortgage Fintech Lending*. Presented at the 2021 INFORMS MSOM Virtual Conference.

Kelley, S.* & Ovchinnikov, A. (2020, November) *Anti-Discrimination Law, AI, and Automated Gender Bias in Non-mortgage Fintech Lending*. Presented at the INFORMS 2020 Annual Meeting (Virtual).

PRESENTATIONS & POSTERS (*presenter)

Kelley, S.*, Heinrich, A., Ovchinnikov, A. (2022, November) *Explainable Artificial Intelligence: Methods over Models*. Presented at the Visiting Scholars Research Seminar, American University, Washington, D.C, US.

Kelley, S.* & Ovchinnikov, A. (2022, May) *Anti-discrimination Regimes & Credit Lending*. Presented at the Law, Society, & AI Seminar, Institut Polytechnique de Paris and HEC (Virtual).

Kelley, S.* (2021, May) *Analytics Research Illustration*. Presented at the Smith School of Business 2021 Doctoral Students “Get to Know You” Research Event, Queen’s University, Kingston (Virtual).

Kelley, S.* & Ovchinnikov, A. (2019, September) *(Anti-Discrimination) Laws, AI, and Gender Bias*. Poster presented at the 2019 Smith School of Business Graduate Consortium, Queen’s University, Kingston.

Kelley, S.*, Levin, Y., & Saunders. D.M. (2018, November) *A Code of Conduct for the Ethical Use of Artificial Intelligence in Financial Services*. Presented at the Scotiabank Conference on AI Ethics, The Bank of Nova Scotia, Toronto.

Kelley, S.*, Levin, Y., & Saunders. D.M. (2018, September) *A Code of Conduct for the Ethical Use of Artificial Intelligence in Financial Services*. Presented at the 2018 Smith School of Business Graduate Consortium, Queen’s University, Kingston.

PUBLICATIONS – REPORTS

Abdur-Rahman, P., Havens, J., **Kelley, S.** et al (2021) IEEE Finance Playbook Version 1.0: Trusted Data and Artificial Intelligence Systems (AIS) for Financial Services. IEEE Standards Association. Available at: <https://standards.ieee.org/industry-connections/ais-finance-playbook.html>

Kelley, S., Levin, Y. & Saunders. D.M. (2018) A Code of Conduct for the Ethical Use of Artificial Intelligence in Financial Services. Prepared for the Canadian Banks AI Ethics Working Group. Available at: <https://www.stephaniekelleysresearch.com/a-code-of-conduct-for-ethical-ai>

RESEARCH FUNDING

2022	Queen’s University Nominee, SSHRC Talent Competition (results Fall 2022, \$50,000)
2021	D.D. Monieson Doctoral Fellowship, Smith School of Business, Queen’s University (\$5,000)
2020-2022	SSHRC Doctoral Fellowship (\$40,000)
2020	Graduate Dean’s Doctoral Field Travel Grant, Queen’s University (\$3,000)
2019-2020	Ontario Graduate Scholarship (\$15,000)
2018-2019	R.S. McLaughlin Fellowship, Queen’s University (\$10,000)
2018	OCE TalentEdge Fellowship (\$15,000)

OTHER HONOURS & AWARDS

2022	Outstanding Reviewer Award, Technology Innovation Management Division, Academy of Management Annual Meeting
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- 2021 Rising Stars in AI Ethics, Women in AI Ethics (<https://womeninaiethics.org/the-list/rising-stars/>)
- 2021 PhD Student Research Excellence Award, Smith School of Business, Queen's University
- 2020 Alan R. Dennis Doctoral Award, Smith School of Business, Queen's University
- 2019 New PhD Student Research Excellence Award, Smith School of Business, Queen's University

PEER REVIEW ACTIVITIES

- Management Information Systems Quarterly
 - Special Issue on Digital Technology and Social Justice
- Academy of Management Annual Meeting 2022, 2023
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OTHER RESEARCH COMMUNITY INVOLVEMENT

- **Panelist**, MSOM DEI Conversation, 2023 INFORMS AGM
- **Session chair**, human-AI collaboration stream, 2023 INFORMS AGM
- **Session chair**, DEI, 2022 DSI AGM

OTHER RESEARCH EXPERIENCE

- 2021 **Research Assistant**, Smith School of Business, Queen's University
 - Working with Dr. Tracy Jenkin, Associate Professor, Distinguished Faculty Fellow of Digital Technology on "Understanding Human-AI Collaborations"
 - Developed experimental design, ethics approval, experiment completion
- 2010 **Research Assistant**, Smith School of Business, Queen's University
 - Worked with Dr. Kathryn Brohman, Associate Professor, Distinguished Faculty Fellow of Digital Technology on "IT Execution"
 - Contributed to literature review

TEACHING EXPERIENCE

- 2023 **Assistant Professor**, Ivey Business School, Western University
 - Developed and delivered 25 case-learning-style lectures for 2 classes of 78 HBA1 undergraduate students, created assessments, managed daily contribution grades, team of 2 teaching assistants, hosted office hours
 - HBA1 3304: "Operations Management" (Teaching evaluations: TBD)
- 2022-2023 **Adjunct Lecturer**, Smith School of Business, Queen's University
 - Designed curriculum, prepared course syllabus, developed and delivered lectures, created assessments, managed in-person classroom environment, hosted office hours, managed grading
 - MBA: MBAS 862: "Topics in Analytics" (Teaching evaluations: 6.5/7)
 - Executive MBA: MBUS 865 – "Big Data & AI" (2022 Teaching evaluations: 6.6/7, 2023 TBD)
- 2021 **Teaching Fellow**, Smith School of Business, Queen's University

- Designed curriculum, prepared course syllabus, developed and delivered lectures, created assessments, managed virtual classroom environment, hosted office hours, managed grading
- Executive MBA: MBUS 865 – “Big Data & AI” (Teaching evaluations: 6.6/7)

2016-2021

Teaching Assistant, Smith School of Business

- Delivered occasional lectures, designed and led tutorials (on class materials & technical programs), set occasional assignments and exams, created solutions for assignments and quizzes, advised student projects, and graded assignments and exams
- Undergraduate Courses:
 - COMM161- “Introduction to Mathematical Analysis for Management” (delivered virtually)
 - COMM350 – “Forecasting and the Business Environment”
 - COMM375 – “International Business”
 - COMM103 – “Business Management”
 - COMM132 – “Marketing 2”
- Graduate Courses:
 - MMA/MMAI/GMMA804 – “Analytics Strategy & Change”
 - MMA867 – “Predictive Analytics”
 - MMA841 – “Supply Chain”
 - MMA860 – “Acquisition & Analysis of Data”

2019

Online Course Design Assistant, Smith School of Business, Queen’s University

- Assisted in the development of the online textbook and online course delivery for MMA/MMAI/GMMA863 – “Statistics for Analytics and AI”

2019

Head Teaching Assistant, Smith School of Business, Queen’s University

- Designed assignments, created assignment solutions, supervised two junior teaching assistants for MMA861 – “Analytical Decision Making”

2019

R Programming Tutorial Lead, Smith School of Business, Queen’s University

2013, 2019

Guest Lecturer, Smith School of Business, Queen’s University

- Undergraduate Courses:
 - COMM434 – “Sales Management”
 - COMM493 – “Analytics and Artificial Intelligence for Business”

TEACHING DEVELOPMENT

2022

Teaching with Cases, Ivey Business School, Western University

- Complete a two-day course on the case teaching methodology

2017 - 2021

**Teaching Course, MGMT993 – “Teaching and Learning in Business”
Smith School of Business, Queen’s University**

- Completed a course on pedagogy and current trends in business education, covering topics including active learning strategies, learning styles, assessment, course design, active and case-based learning, and teaching philosophies

- Guest lectured in an undergraduate class and obtained feedback on teaching style and presentation material from an observer

WORK EXPERIENCE

- 2018 **Research Intern**, The Bank of Nova Scotia (Scotiabank)
Toronto, ON
- Completed a 2-month work term at Scotiabank as part of the TalentEdge Fellowship Program
- 2017 **Consultant**, Kingston Health Sciences Centre Genetics Consolidation Project
Kingston, ON
- Led proposal development for a project to consolidate the Medical Genetics research and clinical facilities across the Kingston Health Sciences Centre.
- 2012 - 2017 **Various Marketing and Sales Management Roles**, Reckitt Benckiser
Toronto, ON
- Developed and executed the national launch strategy for a new OTC pharmaceutical brand (Mucinex) in Canada; managed multiple direct reports and cross-functional teams (including medical, regulatory, and sales); reported directly to Chief Marketing & Trade Marketing Officers; frequently presented to VP/SVP/Exec. SVP roles; and conducted research and in-depth analysis of category data
 - Previous Roles at Reckitt Benckiser:
 - *Senior Brand & Trade Marketing Manager*, Healthcare Relief Portfolio
 - *Brand & Trade Marketing Manager*, Healthcare Expansion Portfolio
 - *Brand Manager*, Healthcare Portfolio
 - *Assistant Brand Manager*, Hygiene Portfolio
 - *Trade Marketing Analyst*, Hygiene Portfolio
 - *Retail Sales Representative*, All Brands

MEDIA COVERAGE

- 2020 Data Futurology Podcast: AI Ethics with Stephanie Kelley. June 2, 2020. Available at: <https://www.datafuturology.com/podcast/2020/6/2/115-ai-ethics-with-stephanie-kelley-phd-candidate-in-ai-ethics-at-queens-university-ieee-ethically-aligned-design-for-finance-working-committee-member>
- 2018 The AI revolution needs a rulebook. Here's a beginning. *Globe and Mail*. December 6, 2018. Available at: <https://www.theglobeandmail.com/business/commentary/article-the-ai-revolution-needs-a-rulebook-heres-a-beginning/>

POLICY CONTRIBUTIONS

- 2022-2023 AI Model Risk Management for Financial Institutions, *CIO Strategy Council*
- 2022 Financial Industry Forum on AI (FIFAI), *Office of the Superintendent of Financial Institutions (OSFI) and the Global Risk Institute (GRI)*
- 2021 AI Ethics Principles, AI Ethics Framework, *Wellbeing.ai Digital Supercluster Project (Lululemon, Wysdom.AI, and Queen's University)*

- 2020 Developing Financial Sector Resilience in a Digital World: Selected Themes in Technology and Related Risks, Discussion Paper, *Office of the Superintendent of Financial Institutions Canada (OSFI)*
- 2018 AI Futures Policy Lab, *CIFAR & Brookfield Institute*
- 2018 Principles to Promote FEAT in the Use of AI and Data Analytics in Singapore's Financial Sector, *Monetary Authority of Singapore*

INVITED PRACTITIONER PRESENTATIONS

- 2023 (July) *Ethical and Intellectual Property Implications of Generative AI Technologies*. IPIIC-McGill Copyright Master Class, McGill University, Montreal, Canada.
- 2023 (May) *McCarthy Tétrault Cross-country AI Summit*. McCarthy Tétrault, Toronto, Canada.
- 2023 (April) *Gender Analytics: Possibilities Conference*, Rotman School of Management, University of Toronto, Toronto, Canada.
- 2022 (Sept) *AI Ethics Implementation*, Presented at Toronto Dominion Bank, Toronto, Canada.
- 2021 (Nov) *The Next Evolution of AI Adoption*, Presented at The Canadian Regulatory Technology Association Annual Event, Toronto, Canada.
- 2021 (May) *AI Ethics: Navigating Guidelines and Regulation*, Presented at Fasken, Toronto, Canada.
- 2020 (Mar) *AI, Ethics, and Law*. Presented at the Conflict Analytics Lab, Queen's University, Kingston, Canada.
- 2019 (Oct) *Artificial Intelligence and Law*. Presented at Stewart McKelvey, Halifax, Canada.
- 2019 (Jan) *The Ethics of Artificial Intelligence in Financial Services*. Presented at Scotiabank Digital Discover Education Session, The Bank of Nova Scotia, Toronto, Canada.

TEACHING COMMUNITY INVOLVEMENT

- 2023 **Faculty Judge**, Deloitte Innovation Forum, Ivey Business School
- 2021 **Case Marker**, Inter-Collegiate Business Competition, MIS Stream
- 2021 **Doctor Consortium Participant**, Technology Innovation Management Doctoral Consortium, Academy of Management Annual General Meeting, Virtual
- 2021 **Committee Member**, Special Appointments Committee for Canada Research Chair in Responsible Use of AI, Queen's University
- 2020-2021 **Committee Member**, Smith School of Business Equity, Diversity, Inclusion, and Indigeneity (EDII) Teaching & Learning Subcommittee
- 2020 **Case Marker**, Inter-Collegiate Business Competition, MIS Stream
- 2020 **Panel Discussant**, Smith School of Business Social Impact Summit
- 2019 **Panel Discussant**, Queen's Smith School of Business Graduate Consortium, Ask Me Anything PhD Panel
- 2019 **Case Marker**, Inter-Collegiate Business Competition, MIS Stream
- 2019 **PhD Representative**, Smith School of Business Research Committee

- 2019 **Panel Discussant**, Queen's Smith School of Business Graduate Consortium, Ask Me Anything PhD Panel
- 2019 **Panel Discussant**, Queen's Smith School of Business Analytics Club
- 2018 **Panel Discussant**, Queen's Smith School of Business Social Impact Summit, AI Ethics Panel

MEMBERSHIPS

- Academy of Management - TIM: Technology & Innovation Management
- MSOM
- INFORMS
- Women in Operations Research Management Science (WORMS) at INFORMS
 - Registered mentor

EDII TRAINING

- LGBTQIA+ Ally Training, Ivey Business School, Western University
- Intercultural Awareness Certificate, Queen's University
- Accessible Instruction for Educators
- Lead, Include, Transform (Equity, Diversity, Inclusion, and Indigenization Training)
- Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS: CORE)

CERTIFICATE PROGRAMS

- 2020 edX Professional Education Certificate, LAW0001X: Comparative Equality and Anti-discrimination Law, Stanford Online

TECHNICAL SKILLS

Programming Languages	R, Python
Statistical Data Analytics	STATA, SPSS, SAS, gretl, SIMUL-8, Palisade@RISK, Excel
Qualitative Data Analysis	NVivo
Marketing Research	Google Analytics, Incite, IMS Health, Nielsen BASES
Sales Analytics	Accelerate Sales Forecasting & Reporting, Nielsen Cross-Outlet Facts, Nielsen MarketTrack, Shiloh POS systems

LANGUAGES

- English (first language)
- French (intermediate)

PERSONAL INTERESTS

CrossFit, running, cycling, paddleboarding
 Hiking (with my dog!)
 Cooking