Michael D. Ekstrand, Ph.D

CURRICULUM VITAE

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EDUCATION

Ph.D (2014)	Computer Science, University of Minnesota. Advisers: John T. Riedl and Joseph A. Konstan
B.S. (2007)	Computer Engineering, Iowa State University.

EMPLOYMENT HISTORY

2023–present	*Assistant Professor*, Dept. of Information Science, **Drexel University**
2022–2023	*Associate Professor*, Dept. of Computer Science, **Boise State University** *Co-director*, People and Information Research Team (PIReT)
2016–2022	*Assistant Professor*, Dept. of Computer Science, **Boise State University** *Co-director*, People and Information Research Team (PIReT)
2014–2016	*Assistant Professor*, Dept. of Computer Science, **Texas State University**
2008–2014	*Graduate Research Assistant*, GroupLens Research, **University of Minnesota**
Su 2012, F 2013	*Instructor*, Dept. of Computer Science, **University of Minnesota**
Summer 2010	*Research Intern*, **Autodesk Research** (Toronto)
2007–2008, 2011	*Teaching Assistant*, Dept. of Computer Science, **University of Minnesota**
2005–2007	*Undergrad RA*, Scalable Computing Laboratory, **Iowa State University**

STUDENTS

PH.D. GRADUATES

- Ngozi Ihemelandu (Ph.D. 2024)
- Amifa Raj (Ph.D. 2023; Applied Scientist at Microsoft)

M.S. GRADUATES

- Srabanti Guha (M.S. 2023; project: *Explaining Misallocated Exposure across Multiple Rankings*)
- Carlos Segura Cerna (M.S. 2020; project: *Recommendation Server for LensKit*; software engineer at Cradlepoint)
- Mucun Tian (M.S. 2019; thesis: *Estimating Error and Bias of Offline Recommender System Evaluation Results*; Sr. Scientist at Pandora)
- Vaibhav Mahant (M.S. 2016, Texas State University; thesis: *Improving Top-N Evaluation of Recommender Systems*; now at Sagezza / Goldman Sachs)
- Sushma Channamsetty (M.S. 2016, Texas State University; thesis: *Recommender Response to User Profile Diversity and Popularity Bias*; Sr. Software Engineer at Q2)

- Mohammed Imran R Kazi (M.S. 2016, Texas State University; thesis: *Exploring Potentially Discriminatory Biases in Book Recommendation*; software engineer at eBay)
- Shuvabrata Saha (M.S. 2016, Texas State University; co-advised with Dr. Apan Qasem; thesis: *A Multi-objective Autotuning Framework For The Java Virtual Machine*; software developer at PHEAA)

UNDERGRADUATE STUDENT RESEARCH

I have supported and mentored the following undergraduate research students: Christine Pinney (BSU, UGRA + REU), Liana Shiroma (Colby Coll., REU 2021), Stephen Randall (U. Pitt, REU 2021), Connor Wood (BSU, REU 2020 + UGRA), Ananda Montoly (Smith Coll., REU 2020), Sandra Ambriz (BSU, HERC + UGRA).

Funding key:

- UGRA: undergraduate research assistant hired from research funds
- REU: Research Experience for Undergraduates
- HERC: Higher Education Research Consortium

RESEARCH FUNDING

EXTERNAL GRANTS

- 2023–2025: NSF 22-32553: *Collaborative Research: CCRI: New: A Research News Recommender Infrastructure with Live Users for Algorithm and Interface Experimentation* ($1.4M; Drexel PI, my share $150K; PI Joseph A. Konstan, UMN).
- 2018–2024: NSF 17-51278: *CAREER: User-Based Simulation Methods for Quantifying Sources of Error and Bias in Recommender Systems* ($514,081; PI). Total includes REU supplements.

INTERNAL GRANTS

- 2017: Boise State College of Education Civility Grant *LITERATE: Locating Informational Texts for Engaging Readers And Teaching Equitably* ($19K; co-PI; with PI Katherine Wright & co-PI Sole Pera)
- 2014: Texas State University Research Enhancement Program (competitive internal research grant) *Temporal Analysis of Recommender Systems* ($8K; PI)

PUBLICATIONS

Author formatting key: **myself**, advised student, other student; [†]presenter, [§]undergraduate student.

Citation counts from Google Scholar (total 4698, *h*-index 29).

JOURNAL ARTICLES // 9

Michael D. Ekstrand, Ben Carterette, and Fernando Diaz. 2024. "Distributionally-Informed Recommender System Evaluation". *Transactions on Recommender Systems* **2**(1) (March 7th, 2024), 6:1–27. DOI 10.1145/3613455. arXiv:2309.05892 [cs.IR]. Cited 7 times.

Jonathan Stray, Alon Halevy, Parisa Assar, Dylan Hadfield-Menell, Chloe Bakalar, Craig Boutilier, Amar Ashar, Lex Beattie, **Michael Ekstrand**, Claire Leibowicz, Connie Moon Sehat, Sara Johansen, Lianne Kerlin, David Vickrey, Spandana Singh, Sanne Vrijenhoek, Amy Zhang, Mckane Andrus, Natali Helberger, Polina Proutskova, Tanushree Mitra, and Nina Vasan. 2023. "Building

[◊] These publications have citations merged in Google Scholar; count is reported on the most most final version, such as the journal expansion of a conference article.

Human Values into Recommender Systems: An Interdisciplinary Synthesis". *Transactions on Recommender Systems* (November 13th, 2023). DOI 10.1145/3632297. arXiv:2207.10192 [cs.IR]. Cited 35 times.

Michael D. Ekstrand, Anubrata Das, Robin Burke, and Fernando Diaz. 2022. "Fairness in Information Access Systems". *Foundations and Trends® in Information Retrieval* **16**(1–2) (July 11th, 2022), 1–177. DOI 10.1561/1500000079. arXiv:2105.05779 [cs.IR]. Impact factor: 8. Cited 126 times.

Michael D. Ekstrand and Daniel Kluver. 2021. "Exploring Author Gender in Book Rating and Recommendation". *User Modeling and User-Adapted Interaction* **31**(3) (February 4th, 2021), 377–420. DOI 10.1007/s11257-020-09284-2. arXiv:1808.07586v2. Impact factor: 4.412. Cited 167 times.

Michael D. Ekstrand, Katherine Landau Wright, and Maria Soledad Pera. 2020. "Enhancing Classroom Instruction with Online News". *Aslib Journal of Information Management* **72**(5) (June 15th, 2020), 725–744. DOI 10.1108/AJIM-11-2019-0309. Impact factor: 1.903. Cited 14 times.

Michael D. Ekstrand and Michael Ludwig. 2016. "Dependency Injection with Static Analysis and Context-Aware Policy". *Journal of Object Technology* **15**(1) (February 1st, 2016), 1:1–31. DOI 10.5381/jot.2016.15.1.a1. Cited 14 times.

Joseph A. Konstan, J.D. Walker, D. Christopher Brooks, Keith Brown, and **Michael D. Ekstrand**. 2015. "Teaching Recommender Systems at Large Scale: Evaluation and Lessons Learned from a Hybrid MOOC". *Transactions on Computer-Human Interaction* **22**(2) (April 1st, 2015). DOI 10.1145/2728171. Impact factor: 1.293. Cited 116 times (shared with L@S14◊).

Justin J. Levandoski, **Michael D. Ekstrand**, Michael J. Ludwig, Ahmad Eldawy, Mohamed F. Mokbel, and John T. Riedl. 2011. "RecBench: Benchmarks for Evaluating Performance of Recommender System Architectures". *Proceedings of the VLDB Endowment* **4**(11) (August 1st, 2011), 911–920. Acceptance rate: 18%. Cited 21 times.

Michael D. Ekstrand, John T. Riedl, and Joseph A. Konstan. 2011. "Collaborative Filtering Recommender Systems". *Foundations and Trends® in Human-Computer Interaction* **4**(2) (February 1st, 2011), 81–173. DOI 10.1561/1100000009. Cited 1623 times.

PEER-REVIEWED CONFERENCE PAPERS // 30

Ngozi Ihemelandu and **Michael D. Ekstrand**. 2024. "Multiple Testing for IR and Recommendation System Experiments". Short paper in *Proceedings of the 46th European Conference on Information Retrieval* (ECIR '24). *Lecture Notes in Computer Science* **14610**:449–457. DOI 10.1007/978-3-031-56063-7_37. Acceptance rate: 24.3%.

Michael D. Ekstrand, Lex Beattie, Maria Soledad Pera, and Henriette Cramer. 2024. "Not Just Algorithms: Strategically Addressing Consumer Impacts in Information Retrieval". In *Proceedings of the 46th European Conference on Information Retrieval* (ECIR '24, IR for Good track). *Lecture Notes in Computer Science* **14611**:314–335. DOI 10.1007/978-3-031-56066-8_25. Acceptance rate: 35.9%.

Amifa Raj and **Michael D. Ekstrand**. 2024. "Towards Optimizing Ranking in Grid-Layout for Provider-side Fairness". In *Proceedings of the 46th European Conference on Information Retrieval* (ECIR '24, IR for Good track). *Lecture Notes in Computer Science* **14612**:90–105. DOI 10.1007/978-3-031-56069-9_7. Acceptance rate: 35.9%.

Ngozi Ihemelandu† and **Michael D. Ekstrand**. 2023. "Candidate Set Sampling for Evaluating Top-N Recommendation". In *Proceedings of the 22nd IEEE/WIC International Conference on Web*

Intelligence and Intelligent Agent Technology (WI-IAT '23). pp. 88-94. DOI 10.1109/WI-IAT59888.2023.00018. arXiv:2309.11723 [cs.IR]. Acceptance rate: 28%.

Amifa Raj, Bhaskar Mitra, **Michael D. Ekstrand**[†], and Nick Craswell. 2023. "Patterns of Gender-Specializing Query Reformulation". Short paper in *Proceedings of the 46th International ACM SIGIR Conference on Research and Development in Information Retrieval* (SIGIR '23). DOI 10.1145/3539618.3592034. arXiv:2304.13129. Acceptance rate: 25.12%. Cited 1 time.

Ngozi Ihemelandu and **Michael D. Ekstrand**[†]. 2023. "Inference at Scale: Significance Testing for Large Search and Recommendation Experiments". Short paper in *Proceedings of the 46th International ACM SIGIR Conference on Research and Development in Information Retrieval* (SIGIR '23). DOI 10.1145/3539618.3592004. arXiv:2305.02461. Acceptance rate: 25.12%. Cited 1 time.

Christine Pinney[†§], Amifa Raj, Alex Hanna, and **Michael D. Ekstrand**. 2023. "Much Ado About Gender: Current Practices and Future Recommendations for Appropriate Gender-Aware Information Access". In *Proceedings of the 2023 Conference on Human Information Interaction and Retrieval* (CHIIR '23). DOI 10.1145/3576840.3578316. arXiv:2301.04780. Acceptance rate: 39.4%. Cited 10 times.

Amifa Raj[†] and **Michael D. Ekstrand**. 2022. "Measuring Fairness in Ranked Results: An Analytical and Empirical Comparison". In *Proceedings of the 45th International ACM SIGIR Conference on Research and Development in Information Retrieval* (SIGIR '22). pp. 726–736. DOI 10.1145/3477495.3532018. Acceptance rate: 20%. Cited 35 times.

A. K. M. Nuhil Mehdy[†], **Michael D. Ekstrand**, Bart Knijnenburg, and Hoda Mehrpouyan. 2021. "Privacy as a Planned Behavior: Effects of Situational Factors on Privacy Perceptions and Plans". In *Proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization* (UMAP '21). ACM. DOI 10.1145/3450613.3456829. arXiv:2104.11847 [cs.SI]. Acceptance rate: 23%. Cited 18 times.

Ömer Kırnap[†], Fernando Diaz, Asia J. Biega, **Michael D. Ekstrand**, Ben Carterette, and Emine Yılmaz. 2021. "Estimation of Fair Ranking Metrics with Incomplete Judgments". In *Proceedings of The Web Conference 2021* (TheWebConf 2021). ACM. DOI 10.1145/3442381.3450080. arXiv:2108.05152. Acceptance rate: 21%. Cited 36 times.

Michael D. Ekstrand[†]. 2020. "LensKit for Python: Next-Generation Software for Recommender Systems Experiments". In *Proceedings of the 29th ACM International Conference on Information and Knowledge Management* (CIKM '20, Resource track). ACM, pp. 2999–3006. DOI 10.1145/3340531.3412778. arXiv:1809.03125 [cs.IR]. No acceptance rate reported. Cited 73 times.

Fernando Diaz[†], Bhaskar Mitra, **Michael D. Ekstrand**, Asia J. Biega, and Ben Carterette. 2020. "Evaluating Stochastic Rankings with Expected Exposure". In *Proceedings of the 29th ACM International Conference on Information and Knowledge Management* (CIKM '20). ACM, pp. 275–284. DOI 10.1145/3340531.3411962. arXiv:2004.13157 [cs.IR]. Acceptance rate: 20%. Nominated for Best Long Paper. Cited 156 times.

Mucun Tian and **Michael D. Ekstrand**. 2020. "Estimating Error and Bias in Offline Evaluation Results". Short paper in *Proceedings of the 2020 Conference on Human Information Interaction and Retrieval* (CHIIR '20). ACM, pp. 5. DOI 10.1145/3343413.3378004. arXiv:2001.09455 [cs.IR]. Acceptance rate: 47%. Cited 11 times.

Michael D. Ekstrand[†], Mucun Tian, Mohammed R. Imran Kazi, Hoda Mehrpouyan, and Daniel Kluver. 2018. "Exploring Author Gender in Book Rating and Recommendation". In *Proceedings of the 12th ACM Conference on Recommender Systems* (RecSys '18). ACM, pp. 242–250. DOI

10.1145/3240323.3240373. arXiv:1808.07586v1 [cs.IR]. Acceptance rate: 17.5%. Citations reported under UMUAI21◊.

Michael D. Ekstrand†, Rezvan Joshaghani, and Hoda Mehrpouyan†. 2018. "Privacy for All: Ensuring Fair and Equitable Privacy Protections". In *Proceedings of the 1st Conference on Fairness, Accountability and Transparency* (FAT* 2018). PMLR, *Proceedings of Machine Learning Research* **81**:35–47. Acceptance rate: 24%. Cited 87 times.

Michael D. Ekstrand†, Mucun Tian, Ion Madrazo Azpiazu, Jennifer D. Ekstrand, Oghenemaro Anuyah, David McNeill§, and Maria Soledad Pera. 2018. "All The Cool Kids, How Do They Fit In?: Popularity and Demographic Biases in Recommender Evaluation and Effectiveness". In *Proceedings of the 1st Conference on Fairness, Accountability and Transparency* (FAT* 2018). PMLR, *Proceedings of Machine Learning Research* **81**:172–186. Acceptance rate: 24%. Cited 247 times.

Michael D. Ekstrand† and Vaibhav Mahant. 2017. "Sturgeon and the Cool Kids: Problems with Random Decoys for Top-N Recommender Evaluation". In *Proceedings of the 30th International Florida Artificial Intelligence Research Society Conference* (Recommender Systems track). AAAI, pp. 639–644. No acceptance rate reported. Cited 15 times.

Sushma Channamsetty and **Michael D. Ekstrand**†. 2017. "Recommender Response to Diversity and Popularity Bias in User Profiles". Short paper in *Proceedings of the 30th International Florida Artificial Intelligence Research Society Conference* (Recommender Systems track). AAAI, pp. 657–660. No acceptance rate reported. Cited 22 times.

Michael D. Ekstrand† and Martijn C. Willemsen. 2016. "Behaviorism is Not Enough: Better Recommendations through Listening to Users". In *Proceedings of the Tenth ACM Conference on Recommender Systems* (RecSys '16, Past, Present, and Future track). ACM. DOI 10.1145/2959100.2959179. Acceptance rate: 36%. Cited 123 times.

Michael D. Ekstrand†, Daniel Kluver, F. Maxwell Harper, and Joseph A. Konstan. 2015. "Letting Users Choose Recommender Algorithms: An Experimental Study". In *Proceedings of the 9th ACM Conference on Recommender Systems* (RecSys '15). ACM. DOI 10.1145/2792838.2800195. Acceptance rate: 21%. Cited 130 times.

Michael D. Ekstrand†, F. Maxwell Harper, Martijn C. Willemsen, and Joseph A. Konstan. 2014. "User Perception of Differences in Recommender Algorithms". In *Proceedings of the 8th ACM Conference on Recommender Systems* (RecSys '14). ACM. DOI 10.1145/2645710.2645737. Acceptance rate: 23%. Cited 268 times.

Joseph A. Konstan†, J.D. Walker, D. Christopher Brooks, Keith Brown, and **Michael D. Ekstrand**. 2014. "Teaching Recommender Systems at Large Scale: Evaluation and Lessons Learned from a Hybrid MOOC". In *Proceedings of the First ACM Conference on Learning @ Scale* (S '14). ACM. DOI 10.1145/2556325.2566244. Acceptance rate: 37%. Citations reported under TOCHI15◊.

Tien T. Nguyen†, Daniel Kluver, Ting-Yu Wang§, Pik-Mai Hui§, **Michael D. Ekstrand**, Martijn C. Willemsen, and John Riedl. 2013. "Rating Support Interfaces to Improve User Experience and Recommender Accuracy". In *Proceedings of the 7th ACM Conference on Recommender Systems* (RecSys '13). ACM. DOI 10.1145/2507157.2507188. Acceptance rate: 24%. Cited 58 times.

Michael Ekstrand† and John Riedl. 2012. "When Recommenders Fail: Predicting Recommender Failure for Algorithm Selection and Combination". Short paper in *Proceedings of the Sixth ACM*

Conference on Recommender Systems (RecSys '12). ACM, pp. 233–236. DOI 10.1145/2365952.2366002. Acceptance rate: 32%. Cited 85 times.

Daniel Kluver†, Tien T. Nguyen, **Michael Ekstrand**, Shilad Sen, and John Riedl. 2012. "How Many Bits per Rating?". In *Proceedings of the Sixth ACM Conference on Recommender Systems* (RecSys '12). ACM, pp. 99–106. DOI 10.1145/2365952.2365974. Acceptance rate: 20%. Cited 43 times.

Justin J. Levandoski†, Mohamed Sarwat, Mohamed F. Mokbel, and **Michael D. Ekstrand**. 2012. "RecStore: An Extensible And Adaptive Framework for Online Recommender Queries Inside the Database Engine". In *Proceedings of the 15th International Conference on Extending Database Technology* (EDBT '12). ACM, pp. 86–96. DOI 10.1145/2247596.2247608. Acceptance rate: 23%. Cited 18 times.

Michael D. Ekstrand†, Michael Ludwig, Joseph A. Konstan, and John T. Riedl. 2011. "Rethinking The Recommender Research Ecosystem: Reproducibility, Openness, and LensKit". In *Proceedings of the Fifth ACM Conference on Recommender Systems* (RecSys '11). ACM, pp. 133–140. DOI 10.1145/2043932.2043958. Acceptance rate: 27% (20% for oral presentation, which this received). Cited 238 times.

Michael Ekstrand†, Wei Li, Tovi Grossman, Justin Matejka, and George Fitzmaurice. 2011. "Searching for Software Learning Resources Using Application Context". In *Proceedings of the 24th Annual ACM Symposium on User Interface Software and Technology* (UIST '11). ACM, pp. 195–204. DOI 10.1145/2047196.2047220. Acceptance rate: 25%. Cited 53 times.

Michael D. Ekstrand†, Praveen Kannan, James A. Stempter, John T. Butler, Joseph A. Konstan, and John T. Riedl. 2010. "Automatically Building Research Reading Lists". In *Proceedings of the 4th ACM Conference on Recommender Systems* (RecSys '10). ACM, pp. 159–166. DOI 10.1145/1864708.1864740. Acceptance rate: 19%. Cited 123 times.

Michael D. Ekstrand† and John T. Riedl. 2009. "rv you're dumb: Identifying Discarded Work in Wiki Article History". In *Proceedings of the 5th International Symposium on Wikis and Open Collaboration* (WikiSym '09). ACM, pp. 10. DOI 10.1145/1641309.1641317. Acceptance rate: 36%. Selected as Best Paper. Cited 34 times.

BOOK CHAPTERS // 2

Michael D. Ekstrand, Anubrata Das, Robin Burke, and Fernando Diaz. 2022. "Fairness in Recommender Systems". In *Recommender Systems Handbook* (3rd edition). Francesco Ricci, Lior Roach, and Bracha Shapira, eds. Springer-Verlag. DOI 10.1007/978-1-0716-2197-4_18. ISBN 978-1-0716-2196-7. Cited 27 times.

Daniel Kluver, **Michael D. Ekstrand**, and Joseph A. Konstan. 2018. "Rating-Based Collaborative Filtering: Algorithms and Evaluation". In *Social Information Access*. Peter Brusilovsky and Daqing He, eds. Springer-Verlag, *Lecture Notes in Computer Science* vol. 10100, pp. 344–390. DOI 10.1007/978-3-319-90092-6_10. ISBN 978-3-319-90091-9. Cited 139 times.

WORKSHOPS AND POSTERS // 17

These papers have been peer-reviewed for workshops, poster proceedings, and similar venues.

Amifa Raj and Michael D. Ekstrand†. 2023. "Towards Measuring Fairness in Grid Layout in Recommender Systems". Presented at the *6th FAccTrec Workshop on Responsible Recommendation* (peer-reviewed but not archived). arXiv:2309.10271 [cs.IR]. Cited 1 time.

Michael D. Ekstrand[†] and Maria Soledad Pera. 2022. "Matching Consumer Fairness Objectives & Strategies for RecSys". Presented at the *5th FAccTrec Workshop on Responsible Recommendation* (peer-reviewed but not archived). arXiv:2209.02662 [cs.IR]. Cited 1 time.

Amifa Raj[†] and **Michael D. Ekstrand**. 2022. "Fire Dragon and Unicorn Princess: Gender Stereotypes and Children's Products in Search Engine Responses". In *SIGIR eCom '22*. DOI 10.48550/arXiv.2206.13747. arXiv:2206.13747 [cs.IR]. Cited 5 times.

Lawrence Spear[†], Ashlee Milton, Garrett Allen, Amifa Raj, Michael Green, **Michael D. Ekstrand**, and Maria Soledad Pera. 2021. "Baby Shark to Barracuda: Analyzing Children's Music Listening Behavior". In *RecSys 2021 Late-Breaking Results* (RecSys '21). DOI 10.1145/3460231.3478856. Cited 4 times.

Ngozi Ihemelandu[†] and **Michael D. Ekstrand**. 2021. "Statistical Inference: The Missing Piece of RecSys Experiment Reliability Discourse". In *Proceedings of the Perspectives on the Evaluation of Recommender Systems Workshop 2021* (RecSys '21). arXiv:2109.06424 [cs.IR]. Cited 7 times.

Amifa Raj[†], Ashlee Milton, and **Michael D. Ekstrand**. 2021. "Pink for Princesses, Blue for Superheroes: The Need to Examine Gender Stereotypes in Kids' Products in Search and Recommendations". In *Proceedings of the 5th International and Interdisciplinary Workshop on Children & Recommender Systems* (KidRec '21), at IDC 2021. arXiv:2105.09296. Cited 6 times.

Amifa Raj[†], Connor Wood[§], Ananda Montoly[§], and **Michael D. Ekstrand**. 2020. "Comparing Fair Ranking Metrics". Presented at the *3rd FAccTrec Workshop on Responsible Recommendation* (peer-reviewed but not archived). arXiv:2009.01311 [cs.IR]. Cited 33 times.

Alexandra Olteanu, Jean Garcia-Gathright, Maarten de Rijke, and **Michael D. Ekstrand**. 2019. "Workshop on Fairness, Accountability, Confidentiality, Transparency, and Safety in Information Retrieval (FACTS-IR)". In *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval* (SIGIR '19). ACM. DOI 10.1145/3331184.3331644.

Michael D. Ekstrand, Ion Madrazo Azpiazu[†], Katherine Landau Wright, and Maria Soledad Pera. 2018. "Retrieving and Recommending for the Classroom: Stakeholders, Objectives, Resources, and Users". In *Proceedings of the ComplexRec 2018 Second Workshop on Recommendation in Complex Scenarios* (ComplexRec '18), at RecSys 2018. Cited 6 times.

Mucun Tian[†] and **Michael D. Ekstrand**. 2018. "Monte Carlo Estimates of Evaluation Metric Error and Bias". *Computer Science Faculty Publications and Presentations* 148. Boise State University. Presented at the *REVEAL 2018 Workshop on Offline Evaluation for Recommender Systems*, a workshop at RecSys 2018. DOI 10.18122/cs_facpubs/148/boisestate. Cited 1 time.

Michael D. Ekstrand[†]. 2018. "The LKPY Package for Recommender Systems Experiments: Next-Generation Tools and Lessons Learned from the LensKit Project". *Computer Science Faculty Publications and Presentations* 147. Boise State University. Presented at the *REVEAL 2018 Workshop on Offline Evaluation for Recommender Systems*, a workshop at RecSys 2018. DOI 10.18122/cs_facpubs/147/boisestate. arXiv:1809.03125v1 [cs.IR]. Cited 10 times.

Maria Soledad Pera[†], Katherine Wright, and **Michael D. Ekstrand**. 2018. "Recommending Texts to Children with an Expert in the Loop". In *Proceedings of the 2nd International Workshop on Children & Recommender Systems* (KidRec '18), at IDC 2018. DOI 10.18122/cs_facpubs/140/boisestate. Cited 2 times.

Rezvan Joshaghani[†], **Michael D. Ekstrand**, Bart Knijnenburg, and Hoda Mehrpouyan. 2018. "Do Different Groups Have Comparable Privacy Tradeoffs?". In *Moving Beyond a 'One-Size Fits All' Approach: Exploring Individual Differences in Privacy*, a workshop at CHI 2018. Cited 4 times.

Michael D. Ekstrand[†] and Maria Soledad Pera. 2017. "The Demographics of Cool: Popularity and Recommender Performance for Different Groups of Users". In *RecSys 2017 Poster Proceedings*. CEUR, *Workshop Proceedings* **1905**. Cited 15 times.

Michael D. Ekstrand[†]. 2017. "Challenges in Evaluating Recommendations for Children". In *Proceedings of the International Workshop on Children & Recommender Systems* (KidRec), at RecSys 2017. Cited 8 times.

Jennifer D. Ekstrand[†] and **Michael D. Ekstrand**. 2016. "First Do No Harm: Considering and Minimizing Harm in Recommender Systems Designed for Engendering Health". In *Proceedings of the Workshop on Recommender Systems for Health at RecSys '16*. Cited 16 times.

Michael D. Ekstrand. 2014. "Building Open-Source Tools for Reproducible Research and Education". At *Sharing, Re-use, and Circulation of Resources in Cooperative Scientific Work*, a workshop at CSCW 2014.

EDITORIALLY-REVIEWED PUBLICATIONS // 4

These articles have appeared in magazines and similar venues; they have typically undergone some from of editorial review, but usually not full peer review.

Michael D. Ekstrand, Maria Soledad Pera, and Katherine Landau Wright. 2023. "Seeking Information with a 'More Knowledgeable Other'". *ACM Interactions* **30**(1) (January 11th, 2023), 70–73. DOI 10.1145/3573364. Cited 2 times.

Nasim Sonboli, Robin Burke, **Michael Ekstrand**, and Rishabh Mehrotra. 2022. "The Multisided Complexity of Fairness in Recommender Systems". *AI Magazine* **43**(2) (June 23rd, 2022), 164–176. DOI 10.1002/aaai.12054. Cited 22 times.

Alexandra Olteanu, Jean Garcia-Gathright, Maarten de Rijke, **Michael D. Ekstrand**, Adam Roegiest, Aldo Lipani, Alex Beutel, Ana Lucic, Ana-Andreea Stoica, Anubrata Das, Asia Biega, Bart Voorn, Claudia Hauff, Damiano Spina, David Lewis, Douglas W Oard, Emine Yilmaz, Faegheh Hasibi, Gabriella Kazai, Graham McDonald, Hinda Haned, Iadh Ounis, Ilse van der Linden, Joris Baan, Kamuela N Lau, Krisztian Balog, Mahmoud Sayed, Maria Panteli, Mark Sanderson, Matthew Lease, Preethi Lahoti, and Toshihiro Kamishima. 2019. "FACTS-IR: Fairness, Accountability, Confidentiality, Transparency, and Safety in Information Retrieval". *SIGIR Forum* **53**(2) (December 12th, 2019), 20–43. DOI 10.1145/3458553.3458556. Cited 40 times.

Nicola Ferro, Norbert Fuhr, Gregory Grefenstette, Joseph A. Konstan, Pablo Castells, Elizabeth M. Daly, Thierry Declerck, **Michael D. Ekstrand**, Werner Geyer, Julio Gonzalo, Tsvi Kuflik, Krister Lindén, Bernardo Magnini, Jian-Yun Nie, Raffaele Perego, Bracha Shapira, Ian Soboroff, Nava Tintarev, Karin Verspoor, Martijn C. Willemsen, and Justin Zobel. 2018. "The Dagstuhl Perspectives Workshop on Performance Modeling and Prediction". *SIGIR Forum* **52**(1) (June 1st, 2018), 91–101. DOI 10.1145/3274784.3274789. Cited 16 times.

TUTORIALS // 2

Michael D. Ekstrand, Fernando Diaz, and Robin Burke. 2019. "Fairness and Discrimination in Recommendation and Retrieval". Tutorial presented at *Proceedings of the 13th ACM Conference on Recommender Systems* (RecSys '19). pp. 2. DOI 10.1145/3298689.3346964. Cited 44 times.

Michael D. Ekstrand, Fernando Diaz, and Robin Burke. 2019. "Fairness and Discrimination in Retrieval and Recommendation". Tutorial presented at *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval* (SIGIR '19). pp. 2. DOI 10.1145/3331184.3331380. Cited 47 times.

DEMOS // 3

Tobias Vente, **Michael Ekstrand**, and Joeran Beel. 2023. "Introducing LensKit-Auto, an Experimental Automated Recommender System (AutoRecSys) Toolkit". Demo recorded in *Proceedings of the 17th ACM Conference on Recommender Systems* (RecSys '23). pp. 1212–1216. DOI 10.1145/3604915.3610656. Cited 1 time.

Ashlee Milton[†§], Michael Green, Adam Keener, Joshua Ames[§], **Michael D. Ekstrand**, and Maria Soledad Pera. 2019. "StoryTime: Eliciting Preferences from Children for Book Recommendations". Demo recorded in *Proceedings of the 13th ACM Conference on Recommender Systems* (RecSys '19). pp. 2. DOI 10.1145/3298689.3347048. Cited 12 times.

Michael D. Ekstrand[†], Michael Ludwig, Jack Kolb[§], and John T. Riedl. 2011. "LensKit: A Modular Recommender Framework". Demo recorded in *Proceedings of the 5th ACM Conference on Recommender Systems* (RecSys '11). ACM, pp. 349-350. DOI 10.1145/2043932.2044001. Cited 44 times.

PREPRINTS AND REPORTS // 5

Unreviewed preprints, technical reports, and similar manuscripts.

Alexandra Olteanu, **Michael Ekstrand**, Carlos Castillo, and Jina Suh. 2023. "Responsible AI Research Needs Impact Statements Too". arXiv:2311.11776 [cs.AI].

Amifa Raj and **Michael D. Ekstrand**. 2023. "Unified Browsing Models for Linear and Grid Layouts". arXiv:2310.12524 [cs.IR]. Cited 1 time.

Michael D. Ekstrand. 2021. "Multiversal Simulacra: Understanding Hypotheticals and Possible Worlds Through Simulation". arXiv:2110.00811 [cs.IR]. Cited 1 time.

Michael D. Ekstrand and Joseph A. Konstan. 2019. "Recommender Systems Notation: Proposed Common Notation for Teaching and Research". *Computer Science Faculty Publications and Presentations* 177. Boise State University. DOI 10.18122/cs_facpubs/177/boisestate. arXiv: 1902.01348 [cs.IR]. Cited 6 times.

Nicola Ferro, Norbert Fuhr, Gregory Grefenstette, Joseph A. Konstan, Pablo Castells, Elizabeth M. Daly, Thierry Declerck, **Michael D. Ekstrand**, Werner Geyer, Julio Gonzalo, Tsvi Kuflik, Krister Lindén, Bernardo Magnini, Jian-Yun Nie, Raffaele Perego, Bracha Shapira, Ian Soboroff, Nava Tintarev, Karin Verspoor, Martijn C. Willemsen, and Justin Zobel. 2018. "From Evaluating to Forecasting Performance: How to Turn Information Retrieval, Natural Language Processing and Recommender Systems into Predictive Sciences (Dagstuhl Perspectives Workshop 17442)". *Dagstuhl Manifestos* **7**(1) (November 21st, 2018), 96–139. DOI 10.4230/DagMan.7.1.96. Cited 19 times.

WORKSHOP SUMMARIES AND REPORTS // 16

These are summaries for workshops and special issues I have co-organized, as well as outcome reports that aren't listed under another category.

Michael D. Ekstrand, Jean Garcia-Gathright, Nasim Sonboli, Amifa Raj, and Karlijn Dinnissen. 2023. "FAccTRec 2023: The 6th Workshop on Responsible Recommendation". In *Proceedings*

of the 17th ACM Conference on Recommender Systems (RecSys '23). ACM. DOI 10.1145/3604915.3608761.

Michael D. Ekstrand, Graham McDonald, Amifa Raj, and Isaac Johnson. 2023. "Overview of the TREC 2022 Fair Ranking Track". In *The Thirty-First Text REtrieval Conference (TREC 2022) Proceedings* (TREC 2022). arXiv:2302.05558. Cited 29 times.

Michael D. Ekstrand, Graham McDonald, Amifa Raj, and Isaac Johnson. 2022. "Overview of the TREC 2021 Fair Ranking Track". In *The Thirtieth Text REtrieval Conference (TREC 2021) Proceedings* (TREC 2021). https://trec.nist.gov/pubs/trec30/papers/Overview-F.pdf.

Michael D. Ekstrand, Pierre-Nicolas Schwab, Toshihiro Kamishima, and Nasim Sonboli. 2021. "FAccTRec 2021: The 4th Workshop on Responsible Recommendation". In *Proceedings of the 15th ACM Conference on Recommender Systems* (RecSys '21). ACM. DOI 10.1145/3460231.3470932. Cited 1 time.

Michael D. Ekstrand, Allison Chaney, Pablo Castells, Robin Burke, David Rohde, and Manel Slokom. 2021. "SimuRec: Workshop on Synthetic Data and Simulation Methods for Recommender Systems Research". In *Proceedings of the 15th ACM Conference on Recommender Systems* (RecSys '21). ACM. DOI 10.1145/3460231.3470938. Cited 18 times.

Robin Burke, **Michael D. Ekstrand**, Nava Tintarev, and Julita Vassileva. 2021. "Preface to the Special Issue on Fair, Accountable, and Transparent Recommender Systems". *User Modeling and User-Adapted Interaction* **31**(3) (July 24th, 2021), 371–375. DOI 10.1007/s11257-021-09297-5. Cited 7 times.

Asia J. Biega, Fernando Diaz, **Michael D. Ekstrand**, Sergey Feldman, and Sebastian Kohlmeier. 2021. "Overview of the TREC 2020 Fair Ranking Track". In *The Twenty-Ninth Text REtrieval Conference (TREC 2020) Proceedings* (TREC 2020). arXiv:2108.05135. Cited 11 times.

Michael D. Ekstrand, Pierre-Nicolas Schwab, Jean Garcia-Gathright, Toshihiro Kamishima, and Nasim Sonboli. 2020. "3rd FATREC Workshop: Responsible Recommendation". In *Proceedings of the 14th ACM Conference on Recommender Systems* (RecSys '20). ACM. DOI 10.1145/3383313.3411538. Cited 5 times.

Bamshad Mobasher, Stylani Kleanthous, **Michael D. Ekstrand**, Bettina Berendt, Janna Otterbacher, and Avital Schulner Tal. 2020. "UMAP 2020 Fairness in User Modeling, Adaptation and Personalization (FairUMAP 2020) Chairs' Welcome". In *Adjunct Publication of the 28th ACM Conference on User Modeling, Adaptation and Personalization* (UMAP '20). ACM. DOI 10.1145/3386392.3399565.

Bamshad Mobasher, Stylani Kleanthous, **Michael D. Ekstrand**, Bettina Berendt, Janna Otterbacher, and Avital Schulner Tal. 2020. "FairUMAP 2020: The 3rd Workshop on Fairness in User Modeling, Adaptation and Personalization". In *Proceedings of the 28th ACM Conference on User Modeling, Adaptation and Personalization* (UMAP '20). ACM. DOI 10.1145/3340631.3398671. Cited 4 times.

Asia J. Biega, Fernando Diaz, **Michael D. Ekstrand**, and Sebastian Kohlmeier. 2020. "Overview of the TREC 2019 Fair Ranking Track". In *The Twenty-Eighth Text REtrieval Conference (TREC 2019) Proceedings* (TREC 2019). arXiv:2003.11650. Cited 41 times.

Bettina Berendt, Veronika Bogina, Robin Burke, **Michael D. Ekstrand**, Alan Hartman, Stylani Kleanthous, Tsvi Kuflik, Bamshad Mobasher, and Janna Otterbacher. 2019. "FairUMAP 2019 Chairs' Welcome Overview". In *Adjunct Publication of the 27th Conference on User Modeling, Adaptation and Personalization* (UMAP '19). ACM. DOI 10.1145/3314183.3323842.

Toshihiro Kamishima, Pierre-Nicolas Schwab, and **Michael D. Ekstrand**. 2018. "2nd FATREC Workshop: Responsible Recommendation". In *Proceedings of the 12th ACM Conference on Recommender Systems* (RecSys '18). ACM. DOI 10.1145/3240323.3240335. Cited 11 times.

Bamshad Mobasher, Robin Burke, **Michael D. Ekstrand**, and Bettina Berendt. 2018. "UMAP 2018 Fairness in User Modeling, Adaptation and Personalization (FairUMAP 2018) Chairs' Welcome & Organization". In *Adjunct Publication of the 26th Conference on User Modeling, Adaptation, and Personalization* (UMAP '18). ACM. DOI 10.1145/3213586.3226200.

Michael D. Ekstrand and Amit Sharma. 2017. "The FATREC Workshop on Responsible Recommendation". In *Proceedings of the 11th ACM Conference on Recommender Systems* (RecSys '17). ACM. DOI 10.1145/3109859.3109960. Cited 5 times.

Martijn Willemsen, Dirk Bollen, and **Michael Ekstrand**. 2011. "UCERSTI 2: Second Workshop on User-Centric Evaluation of Recommender Systems and Their Interfaces". In *Proceedings of the 5th ACM Conference on Recommender Systems* (RecSys '11). ACM, pp. 395–396. DOI 10.1145/2043932.2044020. Cited 8 times.

OTHER PUBLICATIONS // 5

Publications and presentations that don't fit elsewhere; these have not been peer-reviewed or have been lightly reviewed on the basis of an abstract.

Michael D. Ekstrand, Ben Carterette, and Fernando Diaz. 2021. "Evaluating Recommenders with Distributions". In *Proceedings of the RecSys 2021 Workshop on Perspectives on the Evaluation of Recommender Systems* (RecSys '21). Cited 2 times.

Katherine Landau Wright, David McNeill, **Michael D. Ekstrand**, and Maria Soledad Pera. 2019. "Supplementing Classroom Texts with Online Resources". At *2019 American Educational Research Association Conference*. Cited 17 times.

Katherine Landau Wright, **Michael D. Ekstrand**, and Maria Soledad Pera. 2018. "Supplementing Classroom Texts with Online Resources". At *2018 Annual Meeting of the Northwest Rocky Mountain Educational Research Association*.

Michael D. Ekstrand. 2017. "Yak Shaving with Michael Ekstrand". *CSR Tales* no. 4 (December 29th, 2017). PURL https://purl.org/mde/alpaca.

Michael D. Ekstrand. 2014. *"Towards Recommender Engineering: Tools and Experiments in Recommender Differences"*. Ph.D thesis, University of Minnesota. HDL 11299/165307. Cited 8 times.

SOFTWARE AND DATA

I have built several open-source software packages and data sets in the course of my research and other work. Open-source software distribution and open data are key pieces of my research dissemination strategy. My most significant development efforts are:

- *LensKit*, a toolkit for building, researching, and studying recommender systems. As of Nov. 1, 2022, the original Java software (in development 2010–2018; paper RecSys11) is known to be used in 70 papers and theses and was used by over 2500 students to complete programming assignments in the Recommender Systems MOOC. The Python software (2018–, papers CIKM20-LK and REVEAL18-LK) is used in over 30 papers, theses, and educational resources, including the PBS show *Crash Course AI*, and has been downloaded over 9000 times from the Python Package Index in the last 6 months (according to PyPIStats). The current version is

0.14.2, released on July 16, 2022; it is the 23rd release of LensKit for Python. `https://lenskit.org` (current list of known uses: `https://lenskit.org/research/`)
- *Book Data Tools*, software tools to integrate multiple public sources of book and book consumption data into a data set for studying social effects in book publication, reading, and recommendation. Used in UMUAI21 and RecSys18. `https://bookdata.piret.info`

My work has also produced a number of utility packages to support this software and other efforts, including:

- *seedbank*, a Python package for consistently seeding random number generators. `https://seedbank.lenskit.org`
- *csr*, a Python package for managing sparse matrices in CSR format compatible with the Numba JIT for scientific python, and with Intel MKL acceleration for several operations. `https://csr.lenskit.org`
- *binpickle*, a Python package for saving scientific data structures (such as machine learning models) to disk in either compressed or memory-mappable format. LensKit uses this package to serialize models for both storage and shared-memory parallelism. `https://binpickle.lenskit.org`
- *happylog*, a Rust package for easily configuring log output for command-line programs. `https://github.com/mdekstrand/happylog`
- *Grapht*, a dependency injection framework for Java with novel configuration and static analysis capabilities (paper JOT16). `http://grapht.grouplens.org`

INVITED TALKS

- Mar. 2024: Keynote at IR4U2 workshop at ECIR 2024
- Feb. 2024: Seminar at University of Colorado at Boulder
- Oct. 2023: Virtual seminar at the University of Glasgow
- May 2023: Invited talk at ICA post-conference panel
- Mar. 2023: Seminar at the University of Texas at Austin HCI group
- Jan. 2023: Seminar at the University of Washington RAISE group
- Nov. 2022: Keynote at IBIS2022 (Information-Based Inductive Systems and Machine Learning) workshop (Tsukuba, Japan)
- Nov. 2022: Seminar at Waseda University (Japan)
- Oct. 2022: Keynote at EvalRS workshop on rounded evaluation of recommender systems at CIKM 2022
- Sep. 2022: Guest lecture on IR fairness and test collections for University of Maine IR course
- Mar. 2022: 'You Might Also Think This Is Unfair' at University of Michigan School of Information (online)
- Nov. 2021: 'Information Systems for Human Flourishing' at Vector Institute, Toronto, Canada (online)
- Oct. 2020: Guest lecture on recommender systems and fairness for Carnegie Mellon University Human-AI Interaction course
- Apr. 2020: Guest lecture on recommender systems and fairness for Emory University recommender systems course
- Mar. 2020: 'User, Agent, Subject, Spy' seminar at Boise State University Ph.D in Computing Colloquium
- Oct. 2019: 'Online Recommendation: What? Where? Why? How?' session at the Idaho Library Association 2019 Conference
- Aug. 2019: 'User, Agent, Subject, Spy' seminar at Microsoft Research Montréal

- Jul. 2019: 'User, Agent, Subject, Spy' seminar at Criteo AI Labs, Paris, France
- May 2019: 'Recommendations, Decisions, Feedback Loops, and Maybe Saving the Planet' at the CRA CCC Visioning Workshop on Economics and Fairness.
- Dec. 2018: 'User, Agent, Subject, Spy' seminar at Clemson University
- Nov. 2018: 'User, Agent, Subject, Spy' seminar at Carnegie Mellon University Human-Computer Interaction Institute
- Nov. 2018: Guest lecture on recommender systems for Carnegie Mellon University Human-AI Interaction course
- Nov. 2017: 'Making Information Systems Good for People' at Whitman College (Walla Walla, WA)
- Jun. 2017: 'Recommending for People' seminar at RecSysNL at TU Delft
- Jun. 2017: 'Recommending for People' seminar at Jheronimus Academy of Data Science
- Jun. 2017: 'Recommending for People' seminar at UCL Mons
- Jun. 2017: 'Responsible Recommendation' at the Brussels Big Data and Ethics Meetup, the inaugural event of the DigitYser Big Data community
- Nov. 2016: 'Recommending for People' colloquium at the University at Albany Dept. of Computer Science
- Oct. 2016: 'Introduction to Recommender Systems' at the Clearwater Developer Conference
- Sep. 2015: 'Challenges in Scaling Recommender Systems Research' at the Workshop on Large-Scale Recommender Systems at RecSys '15 in Vienna, Austria
- Sep. 2015: 'Levelling Up your Academic Career' at the Doctoral Symposium at RecSys '15 in Vienna, Austria
- Sep. 2012: 'Flexible Recommender Experiments with LensKit' at the RecSys Challenge Workshop at RecSys '12 in Dublin, Ireland
- Sep. 2012: 'The MovieLens Data Set' (invited talk) at the RecSys Challenge Workshop at RecSys '12 in Dublin, Ireland

TEACHING

DREXEL UNIVERSITY

- DSCI 641 (Recommender Systems for Data Science)
- INFO 659 (Intro to Data Analytics)

BOISE STATE UNIVERSITY

- CS 410/510 (Databases)
- CS 533 (Intro to Data Science)
- CS 538 (Recommender Systems)
- CS 697 (Special Topics: Equity and Discrimination in Computing Systems)

TEXAS STATE UNIVERSITY

- CS 4332 (Intro to Database Systems)
- CS 3320 (Internet Software Development)
- CS 5369Q/4379Q (Recommender Systems)
- CS 4350 (Unix Systems Programming)

COURSERA

I co-created the Recommender Systems specialization on Coursera, along with its two previous single-class versions, with Joseph A. Konstan. This course has reached over 95,000 learners across its 3 iterations.

UNIVERSITY OF MINNESOTA

- Instructor for CS 5980-1 (Intro to Recommender Systems)
- Summer instructor for CS 1902 (Structure of Computer Programming II)
- TA for CSCI 5125 (Collaborative and Social Computing) and CSCI 1902

TEACHING PROFESSIONAL DEVELOPMENT

- Boise State University teaching portfolio faculty learning community.
- Boise State University *Ten for Teaching* program.
- Boise State University Center for Teaching and Learning *Course Design Institute*, a one-week intensive session in Summer 2017.
- CTL workshops on service learning, mastery-based grading, and other topics.
- Texas State University's *Program for Excellence in Teaching and Learning* (2014–2015).
- *Preparing Future Faculty* at the University of Minnesota.

SERVICE

ONGOING PROFESSIONAL SERVICE, MEMBERSHIPS, AND HONORS

- Associate editor, ACM *Transactions on Recommender Systems* (2024–)
- Editorial board, *Foundations and Trends in Information Retrieval* (2023–)
- Co-chair, FAccT Network, 2019–
- Steering committee, *ACM Conference on Recommender Systems* (RecSys), 2017–
- Senior Member of the Association for Computing Machinery (since 2019)
- Distinguished Reviewer, ACM *Transactions on Interactive Intelligent Systems* (TiiS) (2017–present)

PROGRAM COMMITTEE AND EDITORIAL SERVICE

- *ACM CIKM* main program (PC 2024), resource track (PC 2020–2021)
- *ACM RecSys* main program (SPC 2019–2021, 2023–2024; PC 2014–2017), Reproducibility (PC 2021, 2023), LBR (PC 2019–2020), Posters (PC 2016–2017)
- *ACM FAccT* (AC 2018, 2023–2024; PC 2019–2021)
- *ACM SIGIR* main program (AC 2024; PC 2020–2021, 2023), Perspectives (PC 2021), short papers (PC 2021), resource track (PC 2021)
- *ECIR* main program (PC 2024), short papers (PC 2024), IR for Good (PC 2024), tutorials (PC 2024)
- Best paper committee, *ACM SIGIR 2023*
- *SIGIR Asia-Pacific* (SPC 2023)
- Best paper committee, *TheWebConf 2023*
- Track chair, *UMAP 2023* (Responsibility, Compliance, and Ethics)
- **Program co-chair**, *16th ACM Conference on Recommender Systems* (RecSys 2022)
- Guest editor, 2021 special issue of *User Modeling and User-Adapted Interaction* (UMUAI) on fairness in user modeling.
- *TheWebConf* User Modeling, Behavior, & Personalization (SPC 2021; PC 2016, 2018–2020), Behavior Analysis and Recommendation (PC 2016)
- Track Chair, *UMAP 2021*
- *ACM WSDM* (PC 2020–2021)
- Ethics reviewer, *NeurIPS 2021*
- *UMAP* (PC 2018–2020)
- *CHI* Posters (PC 2019)
- *FLAIRS* Special Track on Recommender Systems (PC 2015–2017)
- *ACM SAC* Recommender Systems (PC 2013, 2016)

- *NeurIPS*
- Additional conference reviews for *CHI* (2012, 2015–2017, 2019–2020), *CSCW* (2014, 2017, 2019–2020), *FAccT* (2020), *ICSOC* (2016), *IUI* (2016), and *UIST* (2012, 2016–2017, 2020).
- Journal reviews for *Advances in AI*, *Artificial Intelligence Review*, *CACM*, *CSUR*, *IBM Journal of Research and Development*, *INRT*, *Information Retrieval Journal*, *Interacting with Computers*, *International Journal of Artificial Intelligence Tools*, *JMLR Open Source*, *JRC*, *Journal of Librarianship & Information Science*, *PLOS ONE*, *PeerJ Computer Science*, *TDS*, *TDSC*, *TIST*, *TKDE*, *TOCHI*, *TOIS*, *TORS*, *TSC*, *TWEB*, *TiiS*, and *UMUAI*.
- Reviewer for numerous workshops at *RecSys*, *UMAP*, and elsewhere.

OTHER PROFESSIONAL SERVICE

- Executive committee, *ACM Conference on Fairness, Accountability, and Transparency* (FAccT), 2020–2023
- Steering committee, *ACM Conference on Fairness, Accountability, and Transparency* (FAccT), 2017–2023 (inaugural member)
- Co-author and signatory, FAccT Statement on AI Harms and Policy (2023); covered by VentureBeat and The Hill (op-ed)
- Co-organizer, CRAFT panel "Theories of Change in Responsible AI" at FAccT 2023
- Ph.D. symposium mentor, CIKM 2023
- Co-organizer, *SimuRec Workshop on Simulation and Synthetic Data for Recommender Systems* at RecSys 2021
- Sponsorship co-chair, ACM FAccT 2021–2022
- Doctoral symposium co-chair, RecSys 2020
- Organized and moderated panel at RecSys 2019 on responsible recommendation
- Co-organizer, TREC Track on Fairness in Information Retrieval (2019–2022)
- PR & Publicity co-chair, *2nd Conference on Fairness, Accountability, and Transparency* (ACM FAT* 2019)
- General co-chair, ACM RecSys 2018
- Publications working group, FAccT steering committee (2017)
- Co-organizer, FATREC Workshop on Responsible Recommendation at RecSys 2017, 2018, 2020, 2021
- Co-organizer, *Workshop on Fairness, Accountability, Confidentiality, Transparency, and Safety in Information Retrieval* (FACTS-IR) at SIGIR 2019
- Co-organizer, FairUMAP workshop at UMAP 2018–2020
- Track co-chair, 2018 *Conference on Fairness, Accountability, and Transparency* Systems track
- Participant in Dagstuhl Perspectives Workshop *Towards Cross-Domain Performance Modeling and Prediction: IR/RecSys/NLP* (2017)
- Publicity co-chair, ACM RecSys 2016
- External advisor, CrowdRec (EU Framework Programme collaborative research project, 2014–2016)
- Proceedings co-chair, ACM CHI 2012–2013
- Demos co-chair, ACM RecSys 2012

DEPARTMENT AND UNIVERSITY SERVICE

- Drexel IS 2023-2024 Faculty Search Committee
- Drexel IS Ph.D. committee (2023-2024)
- Boise State 2020–2021 CS Faculty Search Committee
- Boise State COEN SAGE Scholars Program Mentor (2019–2021)
- Boise State College of Engineering Curriculum Committee (2019–2022)
- Boise State Ph.D. in Computing Steering Committee (2017–2022)

- Boise State CS Dept. Curriculum Committee (2017–2022)
- Boise State CS Dept. Graduate Recruiting Committee (2017)
- Texas State CS Dept. Undergraduate Committee (2014–2016)
- Texas State CS Dept. Written Comp Exam Grading (2014–2016)
- UMN CS Graduate Student Association secretary (2009–2010)

COMMUNITY AND CIVIC SERVICE

- January 2023 — joined amicus brief before SCOTUS on *Gonzalez v. Google*.
- July 2020 — taught continuing education session for Idaho Council for Libraries.
- October 2019 — presented at Idaho Library Association Annual Conference.
- February 2019 — addressed Idaho State House Judiciary Committee on H.B. 118, regulating pretrial risk assessment algorithms; through subsequent engagement, I contributed language that is in the final enacted legislation.
- December 2017 — Boise Public Library panel on preparing for a career in computer science.
- 2015 — Judge for Travis Elementary School Science Fair.

MEDIA MENTIONS

- "Getting to know you: This is what chatGPT says Philly is famous for". (Vicky Diaz-Camacho, *Billy Penn* at WHYY, March 11, 2024. `https://billypenn.com/2024/03/11/chatgpt-artificial-intelligence-philadelphia-known-for-cheesesteaks/`).
- "The Deadline Dilemma". (Carolyn Kuimelis, *Teaching* newsletter from *Chronicle of Higher Education*, December 1, 2022. `https://www.chronicle.com/newsletter/teaching/2022-12-01`).
- "Out of the Blue". (Ravi Shankar, *The New Indian Express*, May 1, 2022. `https://www.newindianexpress.com/opinions/columns/ravi-shankar/2022/may/01/outof-theblue-2447591.html`). Quotes from Washington Post article below.
- "Elon Musk wants Twitter's algorithm to be public. It's not that simple." (Reed Albergotti, *The Washington Post*, April 16, 2022. `https://www.washingtonpost.com/technology/2022/04/16/elon-musk-twitter-algorithm/`).
- Quoted at length about how artificial intelligence learns from social signals in "Can AI be horny?" (Chris Stokel-Walker, *Input*, April 28, 2021; Bustle Digital Group. `https://www.inputmag.com/culture/artificial-intelligence-ai-archillect-twitter-horny-sex`).
- Quoted in several articles about FAccT suspending Google's sponsorship for the 2021 conference, in my role as FAccT Sponsor Co-chair and a member of the Executive Committee. These articles include:
  - "AI ethics research conference suspends Google sponsorship." (Khari Johnson, *VentureBeat*, March 2, 2021. `https://venturebeat.com/2021/03/02/ai-ethics-research-conference-suspends-google-sponsorship/`)
  - "Conference suspends Google sponsorship after ethics experts' exit." (D. Matthews, *Times Higher Education*, March 8, 2021. `https://www.timeshighereducation.com/news/conference-suspends-google-sponsorship-after-ethics-experts-exit`)
  - "Tech transparency conference suspends Google sponsorship over transparency concerns." (Colleen Flaherty, *Inside Higher Ed*, March 9, 2021. `https://www.insidehighered.com/news/2021/03/09/tech-transparency-conference-suspends-google-sponsorship-over-transparency-concerns`)
  - "Google offered a professor $60,000, but he turned it down. Here's why." (Rachel Metz, *CNN Business*, March 24, 2021. `https://www.cnn.com/2021/03/24/tech/google-`

ai-ethics-reputation/index.html). I am not the professor who declined funding, but am quoted for context.
  - "How one employee's exit shook Google and the AI industry." (Rachel Metz, *CNN Business*, March 11, 2021. https://www.cnn.com/2021/03/11/tech/google-ai-ethics-future/index.html).

- Quoted about voter file data leaks in "D.C. makes it shockingly easy to snoop on your fellow voters." (Brian Fung, *The Switch* [a blog by *The Washington Post*], June 14, 2016. https://www.washingtonpost.com/news/the-switch/wp/2016/06/14/d-c-s-board-of-elections-makes-it-shockingly-easy-to-snoop-on-your-fellow-voters/)
- Quoted about recommender systems principles in "TV seems to know what you want to see; algorithms at work." (Scott Collins, *Los Angeles Times*, November 21, 2014. https://www.latimes.com/entertainment/tv/la-et-st-tv-section-algorithm-20141123-story.html)