

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](#)
[PI/Lead](#), Impact, Novation, Effectiveness, and Responsibility of Technology for
Information Access Lab (INERTIAL)
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 ✧

CURRENT PH.D. STUDENTS

- ▶ [Samira Vaez Barenji](#) (expected 2029)
- ▶ [Sushobhan Parajuli](#) (expected 2029)

PH.D. GRADUATES

- ▶ [Ngozi Ihemelandu](#) (Ph.D. 2024, Boise State University; dissertation: *Best Practices for Offline Evaluation for Top-N Recommendation: Candidate Set Sampling and Statistical Inference*)
- ▶ [Amifa Raj](#) (Ph.D. 2023, Boise State University; dissertation: *Fair Layouts in Information Access Systems: Provider-Side Group Fairness in Ranking Beyond Ranked Lists*)

M.S. GRADUATES

- ▶ [Srabanti Guha](#) (M.S. 2023, Boise State University; project: *Explaining Misallocated Exposure across Multiple Rankings*)
- ▶ [Carlos Segura Cerna](#) (M.S. 2020, Boise State University; project: *Recommendation Server for LensKit*)
- ▶ [Mucun Tian](#) (M.S. 2019, Boise State University; thesis: *Estimating Error and Bias of Offline Recommender System Evaluation Results*)

- **Vaibhav Mahant** (M.S. 2016, Texas State University; thesis: *Improving Top-N Evaluation of Recommender Systems*)
- **Sushma Channamsetty** (M.S. 2016, Texas State University; thesis: *Recommender Response to User Profile Diversity and Popularity Bias*)
- **Mohammed Imran R Kazi** (M.S. 2016, Texas State University; thesis: *Exploring Potentially Discriminatory Biases in Book Recommendation*)
- **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*)

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; Lead PI Joseph A. Konstan, UMN).
- 2018–2025: NSF 17-51278: *CAREER: User-Based Simulation Methods for Quantifying Sources of Error and Bias in Recommender Systems* (\$514K incl. REU supplements; PI).

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 5429, *h*-index 31).

JOURNAL ARTICLES // 9

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. **2024**.

[◇] 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.

“Building Human Values into Recommender Systems: An Interdisciplinary Synthesis”. *Transactions on Recommender Systems* 2(3) (June 5th, 2024; online November 12th, 2023), 20:1–57. DOI 10.1145/3632297. arXiv:2207.10192 [cs.IR]. Cited 67 times.

Michael D. Ekstrand, Ben Carterette, and Fernando Diaz. **2024**. “Distributionally-Informed Recommender System Evaluation”. *Transactions on Recommender Systems* 2(1) (March 7th, 2024; online August 4th, 2023), 6:1–27. DOI 10.1145/3613455. arXiv:2309.05892 [cs.IR]. NSF PAR 10461937. Cited 16 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 10.1561/15000000079. arXiv:2105.05779 [cs.IR]. NSF PAR 10347630. Impact factor: 8. Cited 189 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. NSF PAR 10218853. Impact factor: 4.412. Cited 204 times (shared with RecSys18⁰).

Michael D. Ekstrand, Katherine Landau Wright, and Maria Soledad Pera. **2020**. “Enhancing Classroom Instruction with Online News”. *Aslib Journal of Information Management* 72(5) (November 17th, 2020; online June 14th, 2020), 725–744. DOI 10.1108/AJIM-11-2019-0309. Impact factor: 1.903. Cited 19 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 16 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 118 times (shared with L@S14⁰).

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 22 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 10.1561/11000000009. Cited 1738 times.

PEER-REVIEWED CONFERENCE PAPERS // 31

Andrés Ferraro, **Michael D. Ekstrand**, and Christine Bauer. **2024**. “It’s Not You, It’s Me: The Impact of Choice Models and Ranking Strategies on Gender Imbalance in Music Recommendation”. Short paper in *Proceedings of the 18th ACM Conference on Recommender Systems* (RecSys ’24). ACM. DOI 10.1145/3640457.3688163. arXiv:2409.03781 [cs.IR].

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. NSF PAR 10497108. Acceptance rate: 24.3%. Cited 2 times.

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. NSF PAR 10497110. Acceptance rate: 35.9%. Cited 8 times.

[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. NSF PAR 10497109. Acceptance rate: 35.9%. Cited 1 time.

[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]. NSF PAR 10487293. Acceptance rate: 28%. Cited 3 times.

[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. NSF PAR 10423689. Acceptance rate: 25.1%. Cited 3 times.

[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. NSF PAR 10423691. Acceptance rate: 25.1%. Cited 2 times.

[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. NSF PAR 10423693. Acceptance rate: 39.4%. Cited 21 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. NSF PAR 10329880. Acceptance rate: 20%. Cited 61 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]. NSF PAR 10223377. Acceptance rate: 23%. Cited 24 times.

[Ömer Kirnap](#)[†], [Fernando Diaz](#), [Asia J. Biega](#), [Michael D. Ekstrand](#), [Ben Carterette](#), and [Emine Yilmaz](#). 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. NSF PAR 10237411. Acceptance rate: 21%. Cited 48 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]. NSF PAR 10199450. No acceptance rate reported. Cited 101 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]. NSF PAR 10199451. Acceptance rate: 20%. Nominated for Best Long Paper. Cited 190 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]. NSF PAR 10146883. Acceptance rate: 47%. Cited 12 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 UМУAI21⁰.
- 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 104 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 296 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 16 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 21 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 143 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 139 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 285 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 60 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 88 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 48 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 19 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 255 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 56 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 124 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 37 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 37 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 150 times.

WORKSHOPS AND POSTERS // 18

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

Jacy Reese Anthis, Kristian Lum, **Michael Ekstrand**, Avi Feller, Alexander D’Amour, and Chenhao Tan. **2024**. “[The Impossibility of Fair LLMs](#)”. In *HEAL: Human-centered Evaluation and Auditing of Language Models*, a non-archival workshop at CHI 2024. arXiv:2406.03198 [cs.CL]. Cited 10 times.

[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* at RecSys 2023 (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* at RecSys 2022 (peer-reviewed but not archived). arXiv:2209.02662 [cs.IR]. Cited 6 times.

[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 11 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](#). NSF PAR 10316668. Cited 9 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. NSF PAR 10335669. Cited 9 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* at RecSys 2020 (peer-reviewed but not archived). arXiv:2009.01311 [cs.IR]. Cited 38 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, [Jon 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 9 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* at RecSys 2018. DOI 10.18122/cs_facpubs/148/boisestate. NSF PAR 10074452. 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* at RecSys 2018. DOI 10.18122/cs_facpubs/147/boisestate. arXiv:1809.03125v1 [cs.IR]. Cited 11 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 7 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. NSF PAR 10222636. 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 17 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 11 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 form 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 7 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. NSF PAR 10334796. Cited 35 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 53 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 17 times.

TUTORIALS // 3

Joseph A. Konstan, Robin Burke, and **Michael D. Ekstrand**. **2024**. “[Conducting Recommender Systems User Studies Using POPROX](#)”. Tutorial presented at *Proceedings of the 18th ACM Conference on Recommender Systems* (RecSys '24).

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 49 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 56 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 12 times.

[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. NSF PAR 10133610. Cited 17 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]. Cited 8 times.

[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 2 times.

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 12 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 20 times.

WORKSHOP SUMMARIES AND REPORTS // 18

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, Toshihiro Kamishima, Amifa Raj, and Karlijn Dinnissen. **2024.** “[FAccTRec 2024: The 7th Workshop on Responsible Recommendation](#)”. Meeting summary in *Proceedings of the 18th ACM Conference on Recommender Systems* (RecSys '24). ACM.

Michael D. Ekstrand, Maria Soledad Pera, and Alan Said. **2024.** “[AltRecSys: A Workshop on Alternative, Unexpected, and Critical Ideas on Recommendation](#)”. Meeting summary in *Proceedings of the 18th ACM Conference on Recommender Systems* (RecSys '24). ACM. DOI 10.1145/3640457.3687104.

Michael D. Ekstrand, Jean Garcia-Gathright, Nasim Sonboli, [Amifa Raj](#), and Karlijn Dinnissen. **2023.** “[FAccTRec 2023: The 6th Workshop on Responsible Recommendation](#)”. Meeting summary in *Proceedings of the 17th ACM Conference on Recommender Systems* (RecSys '23). ACM. DOI 10.1145/3604915.3608761. Cited 1 time.

Michael D. Ekstrand, Graham McDonald, [Amifa Raj](#), and Isaac Johnson. **2023.** “[Overview of the TREC 2022 Fair Ranking Track](#)”. Meeting summary in *The Thirty-First Text REtrieval Conference (TREC 2022) Proceedings* (TREC 2022). arXiv:2302.05558. Cited 41 times.

Michael D. Ekstrand, Graham McDonald, [Amifa Raj](#), and Isaac Johnson. **2022.** “[Overview of the TREC 2021 Fair Ranking Track](#)”. Meeting summary 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](#)”. Meeting summary in *Proceedings of the 15th ACM Conference on Recommender Systems* (RecSys '21). ACM. DOI 10.1145/3460231.3470932. Cited 2 times.

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](#)”. Meeting summary in *Proceedings of the 15th ACM Conference on Recommender Systems* (RecSys '21). ACM. DOI 10.1145/3460231.3470938. Cited 20 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 10 times.
- Asia J. Biega, Fernando Diaz, **Michael D. Ekstrand**, Sergey Feldman, and Sebastian Kohlmeier. **2021**. “**Overview of the TREC 2020 Fair Ranking Track**”. Meeting summary in *The Twenty-Ninth Text REtrieval Conference (TREC 2020) Proceedings* (TREC 2020). arXiv:2108.05135. Cited 16 times.
- Michael D. Ekstrand**, Pierre-Nicolas Schwab, Jean Garcia-Gathright, Toshihiro Kamishima, and Nasim Sonboli. **2020**. “**3rd FATREC Workshop: Responsible Recommendation**”. Meeting summary in *Proceedings of the 14th ACM Conference on Recommender Systems* (RecSys '20). ACM. DOI 10.1145/3383313.3411538. Cited 6 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**”. Meeting summary 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**”. Meeting summary in *Proceedings of the 28th ACM Conference on User Modeling, Adaptation and Personalization* (UMAP '20). ACM. DOI 10.1145/3340631.3398671. Cited 5 times.
- Asia J. Biega, Fernando Diaz, **Michael D. Ekstrand**, and Sebastian Kohlmeier. **2020**. “**Overview of the TREC 2019 Fair Ranking Track**”. Meeting summary in *The Twenty-Eighth Text REtrieval Conference (TREC 2019) Proceedings* (TREC 2019). arXiv:2003.11650. Cited 48 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**”. Meeting summary 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**”. Meeting summary in *Proceedings of the 12th ACM Conference on Recommender Systems* (RecSys '18). ACM. DOI 10.1145/3240323.3240335. Cited 13 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**”. Meeting summary 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**”. Meeting summary in *Proceedings of the 11th ACM Conference on Recommender Systems* (RecSys '17). ACM. DOI 10.1145/3109859.3109960. Cited 6 times.
- Martijn Willemsen, Dirk Bollen, and **Michael Ekstrand**. **2011**. “**UCERSTI 2: Second Workshop on User-Centric Evaluation of Recommender Systems and Their Interfaces**”. Meeting summary 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 Sep. 2024, the Python version (2018–) has been used in **63 papers**, theses, and educational resources, including the PBS show *Crash Course AI*, and has been downloaded over **10K times** from the Python Package Index in the last 6 months (according to PyPIStats). The original Java software (in development 2010–2018) is known to be used in **71 papers** and theses and was used by over **2500 students** to complete programming assignments in the Recommender Systems MOOC.

The current version is 0.14.4, released on Feb. 16, 2024; it is the 25rd release of LensKit for Python. Home page: <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.group.lens.org>

INVITED TALKS // 41

- Oct 2024 **Keynote** at *ROEGEN* (workshop at RecSys 2024, Bari, Italy)
“Responsible Recommendation in the Age of Generative AI”
- Jul 2024 **Panelist** at *Workshop on Large Language Models (LLMs) for Evaluation in Information Retrieval* (at SIGIR 2024)
- May 2024 **Overview talk** at *Dagstuhl Seminar 24211*
- May 2024 **Seminar** at *Delft University of Technology* (Delft, NL)
“Search, Recommendation, and Sea Monsters”
- Mar 2024 **Keynote** at *IR4U2* (workshop at ECIR 2024, Glasgow, Scotland)
“To Serve Whom and How?”
- Feb 2024 **Seminar** at *University of Colorado at Boulder*
“Search, Recommendation, and Sea Monsters”
- Oct 2023 **Seminar** at *University of Glasgow* (virtual)
“Search, Recommendation, and Sea Monsters”
- May 2023 **Invited talk** at *Beyond Nudging, Towards Diversity: Understanding Transparent Algorithmic Recommendation Practices for Media and Communications* (post-conference panel at ICA 2023, virtual)
“Beyond Diversity and Transparency: Normative Recommendation Goals in Human Context”
- Mar 2023 **Seminar** at *University of Texas at Austin HCI group*
“Search, Recommendation, and Sea Monsters”
- Feb 2023 **Seminar** at *Drexel University*
“Maps and Lenses on Fairness in Information Access Systems”
- Jan 2023 **Seminar** at *University of Washington RAISE group*
“Equity and Discrimination in Information Access”
- Nov 2022 **Keynote** at *IBIS2022 (Information-Based Inductive Systems and Machine Learning)* (Japanese machine learning conference, Tsukuba, JP)
“The Complexity of Fairness in Information Access”
- Nov 2022 **Seminar** at *Waseda University* (Tokyo, JP)
“Equity and Discrimination in Information Access”
- Oct 2022 **Keynote** at *EvaIRS workshop at CIKM 2022*
“Do You Want To Hunt A Kraken? Mapping and Expanding Recommendation Fairness”
- Aug 2022 **Guest lecture** at *University of Maine IR course* (virtual)
“Fair IR and Test Collections”
- Mar 2022 **Seminar** at *University of Michigan School of Information* (virtual)
“You Might Also Think This Is Unfair”
- Nov 2021 **Seminar** at *Vector Institute* (virtual)
“Information Systems for Human Flourishing”

- Oct 2020 **Guest lecture** at *Carnegie Mellon University Human-AI Interaction course*
“Recommender Systems and Fairness”
- Apr 2020 **Guest lecture** at *Emory University recommender systems course*
“Recommender Systems and Fairness”
- Mar 2020 **Seminar** at *Boise State University Ph.D in Computing Colloquium*
“User, Agent, Subject, Spy”
- Nov 2019 **Seminar** at *University of Texas at Austin*
“Use,r Agent, Subject, Spy”
- Oct 2019 **Session** at *Idaho Library Association 2019 Conference*
“Online Recommendation: What? Where? Why? How?”
- Aug 2019 **Lecture** at *IVADO Summer School* (Montréal, QC)
“Fairness and Discrimination in Recommendation and Retrieval”
- Aug 2019 **Seminar** at *Microsoft Research Montréal*
“User, Agent, Subject, Spy”
- Jul 2019 **Seminar** at *Criteo AI Labs* (Paris, France)
“User, Agent, Subject, Spy ”
- May 2019 **Invited talk** at *CRA CCC Visioning Workshop on Economics and Fairness*
“Recommendations, Decisions, Feedback Loops, and Maybe Saving the Planet”
- Dec 2018 **Seminar** at *Clemson University*
“User, Agent, Subject, Spy”
- Nov 2018 **Seminar** at *Carnegie Mellon University Human-Computer Interaction Institute*
“User, Agent, Subject, Spy”
- Nov 2018 **Guest lecture** at *Carnegie Mellon University Human-AI Interaction course*
“Recommender Systems”
- Nov 2017 **Seminar** at *Whitman College* (Walla Walla, WA)
“Making Information Systems Good for People”
- Oct 2017 **Overview talk** at *Dagstuhl Seminar 17442*
- Jun 2017 **Seminar** at *RecSysNL at TU Delft* (Delft, NL)
“Recommending for People”
- Jun 2017 **Seminar** at *Jheronimus Academy of Data Science* (’s-Hertogenbosch, NL)
“Recommending for People”
- Jun 2017 **Seminar** at *UCL Mons* (Mons, BE)
“Recommending for People”
- Jun 2017 **Keynote** at *Brussels Big Data and Ethics Meetup* (inaugural event of the DigitYser
Big Data community, Brussels, BE)
“Responsible Recommendation”
- Nov 2016 **Seminar** at *University at Albany*
“Recommending for People”
- Oct 2016 **Lecture** at *Clearwater Developer Conference* (Boise, ID)
“Introduction to Recommender Systems ”
- Sep 2015 **Invited talk** at *Large-Scale Recommender Systems* (workshop at RecSys ’15)
“Challenges in Scaling Recommender Systems Research”
- Sep 2015 **Invited talk** at *RecSys Doctoral Symposium*
“Levelling Up your Academic Career”
- Sep 2012 **Invited talk** at *RecSys Challenge* (workshop at RecSys ’12)
“Flexible Recommender Experiments with LensKit”
- Sep 2012 **Invited talk** at *RecSys Challenge* (workshop at RecSys ’12)
“The MovieLens Data Set”

TEACHING

DREXEL UNIVERSITY

Term	Course	Title	Credits	In-Person	Online
F24	INFO 659	<i>Intro to Data Analytics</i>	3	5	20
S24	INFO 659	<i>Intro to Data Analytics</i>	3	16	15
W24	DSCI 641	<i>Rec. Sys. for Data Science</i>	3	16	10
F23	INFO 659	<i>Intro to Data Analytics</i>	3	9	16

BOISE STATE UNIVERSITY

Term	Course	Title	Credits	Students
S23	CS 538	<i>Recommender Systems</i>	3	12
F22	CS 533	<i>Intro to Data Science</i>	3	27
S22	CS 230	<i>Ethics in Computing</i>	3	61
F21	CS 533	<i>Intro to Data Science</i>	3	43
S21	CS 538	<i>Recommender Systems</i>	3	11
F20	CS 533	<i>Intro to Data Science</i>	3	22
S20	CS 697	<i>Equity and Discrimination</i>	3	3
S20	CS 410	<i>Databases</i>	3	36
F19	CS 533	<i>Intro to Data Science</i>	3	28
S19	CS 538	<i>Recommender Systems</i>	3	12
F18	CS 410/510	<i>Databases</i>	3	40
Su18	CS 310-HU	<i>Intro to Databases</i>	1	6
S18	CS 410/510	<i>Databases</i>	3	22
F17	CS 533	<i>Intro to Data Science</i>	3	22
S17	CS 597	<i>Recommender Systems</i>	3	13
F16	CS 410/510	<i>Databases</i>	3	28

TEXAS STATE UNIVERSITY

Term	Course	Title	Students
S16	CS 3320	<i>Internet Software Development</i>	48
S16	CS 5369Q/4379Q	<i>Recommender Systems</i>	26
F15	CS 4332	<i>Intro to Database Systems</i>	39
S15	CS 5369Q/4379Q	<i>Recommender Systems</i>	28
S15	CS 4350	<i>Unix Systems Programming</i>	32
F14	CS 4332	<i>Intro to Database Systems</i>	50

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

Term	Course	Title	Role	Students
F13	CSCI 5980-1	<i>Intro to Recommender Systems</i>	Inst	~35
S12	CSCI 1902	<i>Structure of Comput. Prog. II</i>	Inst	~25

Term	Course	Title	Role	Students
S11	CSCI 5125	<i>Collaborative and Social Computing</i>	TA	~30
Su08	CSCI 1902	<i>Structure of Comput. Prog. II</i>	TA	~30
S08	CSCI 1902	<i>Structure of Comput. Prog. II</i>	TA	~120
F07	CSCI 1902	<i>Structure of Comput. Prog. II</i>	TA	~120

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**, *Association for Computing Machinery* (since 2019)
- **Distinguished Reviewer**, *ACM Transactions on Interactive Intelligent Systems* (TIIIS) (2017–present)

PAST SERVICE HIGHLIGHTS

- **Executive committee**, *ACM Conference on Fairness, Accountability, and Transparency* (FACCT), 2020–2023
- **Program co-chair**, *16th ACM Conference on Recommender Systems* (RecSys 2022)
- **General co-chair**, *12th ACM Conference on Recommender Systems* (RecSys 2018)

PROGRAM COMMITTEE AND EDITORIAL SERVICE

2024

- **Program committee**, *ECIR 2025* (technical program, short papers)
- **Program committee**, *ACM CIKM 2024*
- **Senior program committee**, *ACM RecSys 2024*
- **Area chair**, *ACM FACCT 2024*
- **Area chair**, *ACM SIGIR 2024*
- **Reviewer**, *ACM Transactions on Information Systems*
- **Reviewer**, *ACM Transactions on Recommender Systems*
- **Reviewer**, *ACM Transactions on Interactive Intelligent Systems*
- **Reviewer**, *ACM Transactions on Social Computing*
- **Reviewer**, *ACM Computing Surveys*
- Workshop reviewing: *RecSys in HR @ RecSys 2024*, *FACCTRec @ RecSys 2024*, *RecSoGood @ RecSys 2024*, *ROGEN @ RecSys 2024*, and *EXUM @ UMAP 2024*

2023

- **Program committee**, *ECIR 2024* (technical program, short papers, IR for Good, tutorials)
- **Senior program committee**, *ACM RecSys 2023*

- Program committee, *ACM RecSys 2023* (Reproducibility)
- Senior program committee, *SIGIR Asia-Pacific 2023*
- Best paper committee, *ACM SIGIR 2023*
- Best paper committee, *TheWebConf 2023*
- Program committee, *ACM SIGIR 2023*
- Track chair, *UMAP 2023* (Responsibility, Compliance, and Ethics)
- Area chair, *ACM FAccT 2023*
- Reviewer, *ACM Transactions on Recommender Systems*
- Reviewer, *ACM Transactions on Information Systems*
- Reviewer, *ACM Transactions on Interactive Intelligent Systems*
- Reviewer, *ACM Computing Surveys*
- Reviewer, *ACM Transactions on Social Computing*
- Reviewer, *ACM Journal of Responsible Computing*
- Reviewer, *Information Retrieval Journal*
- Workshop reviewing: *RecSys4HR at RecSys* and *PERSPECTIVES at RecSys*

2022

- Reviewer, *ACM Transactions on Recommender Systems*
- Reviewer, *ACM Computing Surveys*
- Reviewer, *ACM Transactions on Intelligent Systems and Technology*
- Reviewer, *Information Retrieval Journal*
- Reviewer, *Journal of Librarianship & Information Science*
- Reviewer, *ACM Transactions on Interactive Intelligent Systems*
- Reviewer, *User Modeling and User-Adapted Interaction*

2021

- Guest editor, 2021 special issue of *User Modeling and User-Adapted Interaction* (UMUAI) on fairness in user modeling.
- Track Chair, *UMAP 2021*
- Program committee, *ACM SIGIR 2021* (technical program, Perspectives, short papers, resource track)
- Senior program committee, *ACM RecSys 2021*
- Program committee, *ACM RecSys 2021* (Reproducibility)
- Program committee, *ACM CIKM 2021* (resource track)
- Program committee, *ACM WSDM 2021*
- Ethics reviewer, *NeurIPS 2021*
- Reviewer, *User Modeling and User-Adapted Interaction*
- Reviewer, *ACM Computing Surveys*
- Reviewer, *ACM Transactions on Interactive Intelligent Systems*
- Reviewer, *ACM Transactions on Information Systems*
- Reviewer, *ACM/IMS Transactions on Data Science*
- Reviewer, *ACM Transactions on Computer-Human Interaction*
- Workshop reviewing: *BIAS 2021 at ECML-PKDD*, *BIAS 2021 at ECIR*, *ExUM at UMAP*, *RecSysHR at RecSys*, *IntRS at RecSys*, and *Perspectives at RecSys*

2020

- Program committee, *ACM SIGIR 2020*
- Program committee, *UMAP 2020*
- Senior program committee, *ACM RecSys 2020*
- Program committee, *ACM CIKM 2020* (resource track)

- Program committee, *ACM RecSys 2020* (LBR)
- Program committee, *ACM WSDM 2020*
- Program committee, *ACM FAccT 2021*
- Senior program committee, *TheWebConf 2021* (User Modeling, Behavior, & Personalization)
- Reviewer, *ACM Transactions on Computer-Human Interaction*
- Reviewer, *ACM Transactions on Interactive Intelligent Systems*
- Reviewer, *ACM Transactions on Information Systems*
- Reviewer, *User Modeling and User-Adapted Interaction*
- Additional reviews for *UIST*, *CSCW*, and *CHI*
- Workshop reviewing: *ExSS-A TEC at IUI*, *Bias at ECIR*, *ExUM at UMAP*, *BIAS at ECMLPKDD*, *ImpactRS*, and *IntRS*

2019

- Senior program committee, *ACM RecSys 2019*
- Program committee, *ACM RecSys 2019* (LBR)
- Program committee, *CHI 2019* (Posters)
- Program committee, *UMAP 2019*
- Program committee, *TheWebConf 2020* (User Modeling, Behavior, & Personalization)
- Reviewer, *User Modeling and User-Adapted Interaction*
- Reviewer, *ACM Transactions on Interactive Intelligent Systems*
- Reviewer, *Communications of the ACM*
- Additional reviews for *FAT*, *FAT*, *CSCW*, and *CHI*
- Workshop reviewing: *HUMANIZE*, *Handling Web Bias @ WWW 2019*, *A TEC @ IUI 2019*, *IntRS @ RecSys 2019*, and *ImpactRS @ RecSys 2019*

2018

- Program committee, *TheWebConf 2019* (User Modeling, Behavior, & Personalization)
- Program committee, *UMAP 2018*
- Reviewer, *ACM Transactions on Interactive Intelligent Systems*
- Reviewer, *ACM Transactions on the Web*
- Reviewer, *IEEE Transactions on Knowledge and Data Engineering*
- Reviewer, *Communications of the ACM*
- Additional reviews for *FAT*
- Workshop reviewing: *HealthRecSys* and *KidRec*

2017

- Program committee, *FLAIRS 2017* (Special Track on Recommender Systems)
- Program committee, *TheWebConf 2018* (User Modeling, Behavior, & Personalization)
- Program committee, *ACM RecSys 2017* (technical program, Posters)
- Reviewer, *Interacting with Computers*
- Additional reviews for *FAT* and *UIST*
- Workshop reviewing: *IntRS at RecSys*, *KidRec at RecSys*, *FATML at KDD*, *EnCHres*, and *SOAP at UMAP*

2016

- Program committee, *FLAIRS 2016* (Special Track on Recommender Systems)
- Program committee, *TheWebConf 2016* (User Modeling, Behavior, & Personalization)
- Program committee, *ACM SAC 2016* (Recommender Systems)
- Program committee, *ACM RecSys 2016* (Posters, technical program)
- Reviewer, *Artificial Intelligence Review*

- ▶ **Reviewer**, *ACM Transactions on Interactive Intelligent Systems*
- ▶ **Reviewer**, *International Journal of Artificial Intelligence Tools*
- ▶ **Reviewer**, *PLOS ONE*
- ▶ **Reviewer**, *JMLR Open Source*
- ▶ **Reviewer**, *IBM Journal of Research and Development*
- ▶ Additional reviews for *IUI*, *CSCW*, *CHI*, *CHI* (Late-Breaking Work), *ICSOC*, and *UIST*
- ▶ Workshop reviewing: *LSRS at RecSys*

2015

- ▶ **Program committee**, *ACM RecSys 2015*
- ▶ **Program committee**, *FLAIRS 2016* (Special Track on Recommender Systems)
- ▶ **Program committee**, *TheWebConf 2016* (Behavior Analysis and Recommendation)
- ▶ **Reviewer**, *ACM Transactions on Intelligent Systems and Technology*
- ▶ **Reviewer**, *User Modeling and User-Adapted Interaction*
- ▶ **Reviewer**, *PeerJ Computer Science*
- ▶ **Reviewer**, *ACM Computing Surveys*
- ▶ **Reviewer**, *Information Retrieval Journal*
- ▶ Additional reviews for *CHI*
- ▶ Workshop reviewing: *Social Personalization and Search at SIGIR*

2014

- ▶ **Program committee**, *ACM RecSys 2014*
- ▶ **Program committee**, *FLAIRS 2015* (Special Track on Recommender Systems)
- ▶ **Reviewer**, *ACM Transactions on Intelligent Systems and Technology*
- ▶ **Reviewer**, *IEEE Transactions on Dependable and Secure Computing*
- ▶ Additional reviews for *CHI* and *CSCW*

2013

- ▶ **Reviewer**, *IEEE Transactions on Knowledge and Data Engineering*
- ▶ **Reviewer**, *ACM Transactions on the Web*

2012

- ▶ **Program committee**, *ACM SAC 2013* (Recommender Systems)
- ▶ **Reviewer**, *Advances in AI*
- ▶ **Reviewer**, *Information Retrieval*
- ▶ Additional reviews for *UIST* and *CHI* (Work in Progress)

OTHER PROFESSIONAL SERVICE

- ▶ **Track co-organizer**, *Product Search and Recommendation* track at TREC 2025
- ▶ **Doctoral symposium co-chair**, *ACM RecSys 2024*
- ▶ **Founder and co-organizer**, *FATREC Workshop on Responsible Recommendation* at RecSys 2017–2018, 2020–2021, 2023–2024
- ▶ **Co-organizer**, *AltRecSys Workshop on Alternative, Unexpected, and Critical Ideas in Recommendation* at RecSys 2024
- ▶ **Participant**, Dagstuhl Seminar 24211: Evaluation Perspectives of Recommender Systems: Driving Research and Education (2024)
- ▶ **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**, *TREC Track on Fairness in Information Retrieval* (2019–2022)
- **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**, *ACM RecSys 2022*
- **Co-organizer**, *FairUMAP workshop* at UMAP 2018–2020
- Organized and moderated panel at RecSys 2019 on responsible recommendation
- **PR & Publicity co-chair**, *2nd Conference on Fairness, Accountability, and Transparency* (ACM FAT* 2019)
- **Co-organizer**, *Workshop on Fairness, Accountability, Confidentiality, Transparency, and Safety in Information Retrieval* (FACTS-IR) at SIGIR 2019
- **Publications working group**, *FAccT steering committee* (2017)
- **Participant**, Dagstuhl Perspectives Workshop 17442: 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 🔗

- “FACT FOCUS: Google autocomplete results around Trump lead to claims of election interference”. (Melissa Goldin, AP, July 30, 2024, <https://apnews.com/article/fact-check-misinformation-google-autocomplete-trump-b31855c23eb6e387dc324983ea4859bc>).

- ▶ “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/out-of-the-blue-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>)