Michael D. Ekstrand, Ph.D
CURRICULUM VITAE

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Education

Ph.D (2014), Computer Science, University of Minnesota, Minneapolis, MN.
   Thesis: *Towards Recommender Engineering: Tools and Experiments for Identifying Recommender Differences*
   Advisers: John T. Riedl and Joseph A. Konstan
B.S. (2007), Computer Engineering (With Distinction), Iowa State University, Ames, IA.

Work History

2014–present
   Assistant Professor, Dept. of Computer Science, Texas State University.
2008–2014
   Graduate Research Assistant, GroupLens Research, Dept. of Computer Science, University of Minnesota
Summer 2012, Fall 2013
   Instructor, University of Minnesota
Summer 2010
   Research Intern, Autodesk Research, Toronto, CA
2007–2008, Spring 2011
   Teaching Assistant, University of Minnesota
2005–2007
   Undergraduate Research Assistant, Scalable Computing Laboratory, Ames Lab, Iowa State University

Teaching History

Texas State University

Fall 2015
   CS 4332 (*Introduction to Database Systems*); 51 students
Spring 2015
   CS 5369Q/4379Q (*Recommender Systems / Introduction to Recommender Systems*); 28 students
   CS 4350 (*Unix Systems Programming*); 34 students

Fall 2014
     CS 4332 (*Introduction to Database Systems*); 51 students

In addition, I have supervised several independent study students.

Coursera

I co-teach *Introduction to Recommender Systems,* a continuously-available MOOC, with Joseph A. Konstan.

University of Minnesota

Fall 2013
     CSCI 5980-1 (*Introduction to Recommender Systems*), co-taught with Joseph A. Konstan; also offered as a MOOC on Coursera.
Summer 2012
     CSCI 1902 (*Structure of Computer Programming II*)
Spring 2011
     CSCI 5125 (*Collaborative and Social Computing*), as teaching assistant
2007–2008
     CSCI 1902 (*Structure of Computer Programming II*), as teaching assistant (3 terms)

Students

- ○ Mohammed R. Imran Kazi, M.S. (expected Spring 2016)
- ○ Vaibhav Mahant, M.S. (expected Spring 2016)
- ○ Shuvabrata Saha, M.S. (expected Spring 2016, co-supervised with Dr. Apan Qasem)

Publications

Book Chapters

Chapter on ratings-based recommender systems in *Social Information Access* (in progress, lead by Daniel Kluver; edited by Peter Brusilovsky)

Journal Publications

Michael D. Ekstrand and Michael Ludwig. 2015. Dependency Injection with Static Analysis and Context-Aware Configuration. Under review for *Journal of Object Technology*.

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, Article 10 (April 2015), 23 pages. DOI=10.1145/2728171.

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 2011), 81–173. DOI=10.1561/1100000009

Refereed Conference Publications

These are full papers published in peer-reviewed conference proceedings.

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 Ninth ACM Conference on Recommender Systems* (RecSys '15). ACM. DOI=10.1145/2792838.2800195. Acceptance rate: 21%.

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 Eighth ACM Conference on Recommender Systems* (RecSys '14). ACM. DOI=10.1145/2645710.2645737. Acceptance rate: 23%.

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* (ACM L@S '14). ACM. DOI=10.1145/2556325.2566244. Acceptance rate: 37%.

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 Seventh ACM Conference on Recommender Systems* (RecSys '13). ACM. DOI=10.1145/2507157.2507188. Acceptance rate: 24%.

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, 99–106. DOI=10.1145/2365952.2365974. Acceptance rate: 20%.

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, 233–236. DOI=10.1145/2365952.2366002. Acceptance rate: 32%.

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, 86–96. DOI=10.1145/2247596.2247608. Acceptance rate: 23%.

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, 133–140. DOI=10.1145/2043932.2043958. Acceptance rate: 27% (20% for oral presentation, which this received).

Justin J. Levandoski, Michael D. Ekstrand, Michael J. Ludwig, Ahmad Eldawy, Mohamed F. Mokbel, John T. Riedl. 2011. RecBench: Benchmarks for Evaluating Performance of Recommender System Architectures *Proc. VLDB Endow.* 4, 11 (August 2011), 911–920. Acceptance rate: 18%.

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, 195–204. DOI=10.1145/2047196.2047220. Acceptance rate: 25%.

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

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, 10 pp. DOI=10.1145/1641309.1641317. Acceptance rate: 36%. *Selected as Best Paper*.

Short Papers

These are short research papers published in conference proceedings. They are also peer-reviewed.
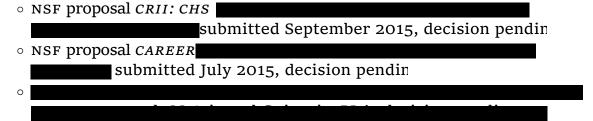
Michael Ekstrand and John Riedl. 2012. When Recommenders Fail: Predicting Recommender Failure for Algorithm Selection and Combination. Short paper in *Proceedings of the Sixth ACM Conference on Recommender Systems* (RecSys '12). ACM, 233–236. DOI=10.1145/2365952.2366002. Acceptance rate: 32%.

Research Funding

Internal Grants

○ Texas State University Research Enhancement Program (competitive internal research grant), $8000: *Temporal Analysis of Recommender Systems*

Under Review

○ NSF proposal *CRII: CHS* ██████████████████████████████ ████████████████████submitted September 2015, decision pendin█
○ NSF proposal *CAREER*████████████████████████████████ ████████ submitted July 2015, decision pendin█
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Invited Talks

○ September 20, 2015: 'Challenges in Scaling Recommender Systems Research' at the Workshop on Large-Scale Recommender Systems at RecSys '15 in Vienna, Austria.
○ September 19, 2015: 'Levelling Up your Academic Career' at the Doctoral Symposium at RecSys '15 in Vienna, Austria.
○ 2012: 'Flexible Recommender Experiments with LensKit' (invited talk) at the RecSys Challenge Workshop at RecSys '12 in Dublin, Ireland.
○ 2012: 'The MovieLens Data Set' (invited talk) at the RecSys Challenge Workshop at RecSys '12 in Dublin, Ireland.

Software

I have built several open-source software packages in the course of my research and other work. Open-source software distribution is a key piece of my research dissemination strategy. My more significant development efforts include:

○ LensKit, a toolkit for building, researching, and studying recommender systems. LensKit has been used in over 20 published papers. `http://lenskit.org`
○ Grapht, a dependency injection framework for Java with novel configuration and static analysis capabilities. `http://grapht.grouplens.org`
○ Goanna (now defunct), a graphical tool for visualizing InfiniBand networks and compute clusters. Written while at the Scalable Computing Laboratory.

Additional programs I have written can be found at `http://md.ekstrandom.net /code/`.

Service

Professional Service

- Publicity co-chair, ACM RecSys 2016
- Program committee, WWW 2016 Track on Behavior Analysis and Personalization
- Program committee, ACM RecSys (2014, 2015)
- Program committee, FLAIRS Special Track on Recommender Systems (2015,2016)
- Proceedings co-chair, ACM CHI 2012–2013
- Demos co-chair, ACM RecSys 2012
- Reviewer for numerous conferences and journals, including:
    - ACM conferences CHI (2015, 2013), CSCW, *Symposium on Applied Computing* (Recommender Systems track, 2013), UIST (2012), WikiSym (2012)
    - ICWSM 2012
    - ACM journals TIST, TOIS, TWEB
    - IEEE journals TDSC, TKDE
    - *User Modeling and User-Adapted Interaction*
    - *Information Retrieval Journal*
    - *ACM Computing Surveys*
    - *User Modeling*
    - *Advances in Multimedia*
    - *Advances in Artificial Intelligence*

Department and University Service

- Texas State CS Dept. Undergraduate Committee (2014–present)
- Texas State CS Dept. Written Comp Exam Grading
- UMN CS Graduate Student Association secretary (2009–2010)