Kathleen Cachel

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EDUCATION:

September 2020 – pres.	**PhD Candidate, Data Science,** Worcester Polytechnic Institute, Advisor: Elke Rundenstier
May 2022.	**Master of Scienc**e, Data Science (GPA: 4.0) Worcester Polytechnic Institute
May 2016	**Bachelor of Science**, Computer Science, Tufts University

PROFESSIONAL EXPERIENCE:

June 2021- pres.	**Worcester Polytechnic Institute**, Worcester, MA Data Science Program Research Assistant
August 2016 - July 2020	**Microsoft,** Cambridge, MA Office 365 Suite Program Manager I-II

CONFERENCE PROCEEDINGS:

Kathleen Cachel, and Elke Rundensteiner. "Fairer Together: Mitigating Disparate Exposure in Kemeny Rank Aggregation." *In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency, (FAccT)*.

Hilson Shrestha, **Kathleen Cachel**, Mallak Alkhathlan, Elke Rundensteiner and Lane Harrison. "Help or Hinder? Fairness in Visualizations for Consensus Ranking]{Help or Hinder? Evaluating the Impact of Fairness Metrics and Algorithms in Visualizations for Consensus Ranking"*In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency, (FAccT)*.

Hilson Shrestha, **Kathleen Cachel**, Mallak Alkhathlan, Elke Rundensteiner and Lane Harrison. "FairFuse: Interactive Visual Support for Fair Consensus Rankings." *In Proceedings of the 2022 IEEE Visualization and Visualization and Visual Analytics, (VIS).*

Kathleen Cachel, and Elke Rundensteiner. "FINS Auditing Framework: Group Fairness for Subset Selections." *In Proceedings of the 2022 AAAI/ACM Conference on AI, Ethics, and Society (AIES)*.

Kathleen Cachel, Elke Rundensteiner, and Lane Harrison. "Mani-Rank: Multiple Attribute and Intersectional Group Fairness For Consensus Ranking." *2022 IEEE 38th International Conference on Data Engineering (ICDE)*.

MANUSCRIPTS

Kathleen Cachel, and Elke Rundensteiner. "A User-friendly Toolkit for Supporting Fair Ranking Task." *In Submission*.

Kathleen Cachel, and Elke Rundensteiner. "Fast and Fair Multi-Criteria Candidate Set Selection." *In Submission*.

TEACHING AND MENTORSHIP EXPERIENCE

Fall 2020 **Teaching Assistant,** DS 501: Graduate Introduction to Machine Learning.

Spring 2021 **Teaching Assistant,** CS 539: Graduate Machine Learning.

Summer 2022 ***Summer NSF REU Project Advisor*** Scoped project and advised team of undergraduates on project: *"Is it (still) Fair? Fairness in Learning to Ranking Under Demographic Uncertainty"***.**

SERVICE:

Student Volunteer:

FAccT 2022

Reviewer:

ACM Transactions on Social Computing 2023

ICTIR 2023

Workshop on Human and Machine Decision @ NeurIPS 2021

PATENTS:

Top-align comments: just-in-time highlights and automatic scrolling. With Apurv Suman, Dheeraj Agarwal, Nicholas Michael Simons, Sneha Jayaprakash, Sophia Isabel Vennix, Derik Bjorn Stenerson, Michael Augustine Tavis, Robin Emily Wakefield, Daniel John Niezgocki Chattan, Harold Sazon Gomez. US Patent #11030395, filed May 2018, granted June 2021.

Comment notifications for electronic content. With Sophia Isabel Vennix, Benjamin Gustav Wilde, Anunaya Pandey, Raphael Jose Landaverde. US Patent #10657318, filed August 2018, granted May 2020.