

Nil-Jana Akpinar

🌐 <https://nakpinar.github.io/>
in [linkedin.com/in/nil-jana-akpinar](https://www.linkedin.com/in/nil-jana-akpinar)

✉ nakpinar@andrew.cmu.edu
🐦 @niljanaakpinar

PROFILE

PhD candidate in statistics and machine learning with focus on Responsible AI, advised by Alexandra Chouldechova and Zachary Lipton. My current research takes a data and algorithm-centered perspective to study the impact of noise, proxies and dynamics on fairness in machine learning.

EDUCATION

PhD in Statistics and Machine Learning (joint), Carnegie Mellon University	Aug 2018 -
MS in Statistics, Carnegie Mellon University	Aug 2018 - May 2020
MS in Mathematics, University of Freiburg (Germany)	Oct 2015 - July 2018
BS in Economics, University of Freiburg (Germany)	Oct 2013 - Sept 2017
BS in Mathematics, University of Freiburg (Germany)	Oct 2012 - Sept 2015

SELECTED PUBLICATIONS

- **Akpinar, N.-J.**, Lipton, Z., Chouldechova, A. (2023) *Non-universal data: The impact of unobserved feature missingness on algorithmic fairness*. Under review.
- **Akpinar, N.-J.***, Leqi, L.*, Hadfield-Menell, D. and Lipton, Z. (2022) *Counterfactual Metrics for Auditing Black-Box Recommender Systems for Ethical Concerns*. Workshop on Responsible Decision Making in Dynamic Environments. International Conference on Machine Learning (ICML 2022). Working paper.
- **Akpinar, N.-J.**, Nagireddy, M., Stapelton, L., Cheng, H.-F., Zhu, H., Wu, S. and Heidari, H. (2022) *A Sandbox Tool to Bias(Stress)-Test Fairness Algorithms*. Poster at the Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO 2022). Full paper under review, preprint: <https://arxiv.org/abs/2204.10233>.
- **Akpinar, N.-J.**, DiCiccio, C., Nandy, P. and Basu, K. (2022) *Long-Term Dynamics of Fairness Intervention in Connection Recommender Systems*. AAAI / ACM Conference on Artificial Intelligence, Ethics, and Society (AIES 2022).
- **Akpinar, N.-J.**, De-Arteaga, M. and Chouldechova, A. (2021) *The effect of differential victim crime reporting on predictive policing systems*. Conference on Fairness, Accountability, and Transparency (FAccT 2021).
- **Akpinar, N.-J.**, Ramdas, A. and Acar, U. (2020) *Analyzing Student Strategies In Blended Courses Using Clickstream Data*. Thirteenth International Conference on Educational Data Mining (EDM 2020).
- **Akpinar, N.-J.**, Kratzwald, B. and Feuerriegel, S. (2020). *Sample Complexity Bounds for Recurrent Neural Networks with Application to Combinatorial Graph Problems*. Thirty-Fourth Conference on Artificial Intelligence (AAAI 2020) (Student Abstract).

* denotes equal contribution

SELECTED AWARDS

- Amazon Graduate Research Fellowship (2021)
- AAAI best three minute student presentation award (2020)
- Full study scholarship by the German National Academic Foundation (2013 - 2018)

EMPLOYMENT

LinkedIn Corporation

Artificial Intelligence - Machine Learning Engineering Intern

Sunnyvale, CA

May 2021 - Aug 2021

- Research on long-term dynamics of fairness enhancement in two-sided marketplace settings.
- Manager: Sakshi Jain (Responsible AI team)

LinkedIn Corporation

Fairness and Privacy Research Engineering Intern

Sunnyvale, CA

May 2020 - Aug 2020

- Developed methods for data anonymization and built a Named Entity Recognition machine learning pipeline.
- Manager: Ting Chen (Anti-Abuse team)