Nil-Jana Akpinar

https://nakpinar.github.io/ nakpinar@andrew.cmu.edu
linkedin.com/in/nil-jana-akpinar @niljanaakpinar

PROFILE

PhD student in statistics and machine learning focusing on algorithmic fairness and societal impacts of AI. Current research takes a data and algorithm-centered perspective to study the impact of noise, proxies and dynamics on fairness in machine learning. Multiple academic publications and presentations. Experience with programming in Python and R.

EDUCATION

PhD student 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 AND PRESENTATIONS

- **Akpinar, N.-J.***, Leqi, Liu*, Hadfield-Menell, Dylan and Lipton, Zachary (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). Working paper, 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 Artifical 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 **Sunnyvale, CA**
Artificial Intelligence - Machine Learning Engineering Intern *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 **Sunnyvale, CA**
Fairness and Privacy Research Engineering Intern *May 2020 - Aug 2020*
- Developed methods for data anonymization and built a Named Entity Recognition machine learning pipeline.
- Manager: Ting Chen (Anti-Abuse team)