

Kevin Stangl

AI Researcher and Phd Candidate in Computer Science, with focus on *fairness/robustness/trustworthy AI*. Papers in *ICML, AISTATSx2, FAACT, FORC, NeurIPS Fairness Workshop, NeurIPS ML Safety Workshop* + working papers. Python/pytorch.

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Professional Experience

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| January -
March 2024 | PhD Research Intern at Intel Labs (Security Privacy Robustness Group) Investigating the ‘natural’ robustness of CLIP based models for anomaly detection. |
| June -
September
2023 | PhD AI Research Associate [Intern] at JP Morgan Chase, XAI (Explainable AI) Group Using decision based attacks from adversarial robustness for black box explain-ability problems. Working paper in progress. |

Education

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| 2019 –
Present | Toyota Technological Institute at Chicago
<i>PhD in Computer Science, advised by Professor Avrim Blum, expected graduation July 2024</i> |
| 2017 - 2019 | Toyota Technological Institute at Chicago
<i>M.S. in Computer Science</i> |
| 2012 - 2017 | University of California, Los Angeles
<i>B.S. in Applied Mathematics</i> |

Publications and Preprints

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| 2024 | 1. Ahmadi, S., Blum, A., Montasser, O. & Stangl, K. <i>Agnostic Multi-Robust Learning Using ERM</i> in <i>AISTATS</i> (2024). arXiv: 2303.08944 [cs.LG]. |
| | 2. Blum, A., Okoroafor, P., Saha, A. & Stangl, K. <i>On the Vulnerability of Fairness Constrained Learning to Malicious Noise</i> in <i>AISTATS</i> (2024). arXiv: 2307.11892. |
| | 3. Cohen, L., Sharifi-Malvajerdi, S., Stangl, K., Vakilian, A. & Ziani, J. <i>Bayesian Strategic Classification</i> 2024. arXiv: 2402.08758 [cs.LG]. |
| 2023 | 4. Cohen, L., Sharifi-Malvajerdi, S., Stangl, K., Vakilian, A. & Ziani, J. <i>Sequential Strategic Screening</i> in <i>ICML</i> (2023). arXiv: :2301.13397. |
| 2022 | 5. Blum, A., Stangl, K. & Vakilian, A. <i>Multi Stage Screening: Enforcing Fairness and Maximizing Efficiency in a Pre-Existing Pipeline</i> in <i>ACM FAccT</i> (2022). arXiv: 2203.07513. |
| 2020 | 6. Blum, A. & Stangl, K. <i>Recovering from Biased Data: Can Fairness Constraints Improve Accuracy?</i> in <i>1st Symposium on Foundations of Responsible Computing, FORC 2020</i> (ed Roth, A.) (2020). arXiv: 1912.01094. |
| 2017 | 7. Bossen, E. et al. <i>Upper and Lower Bounds on the Speed of a One Dimensional Excited Random Walk</i> 2017. arXiv: 1707.02969 [math.PR]. |
| 2016 | 8. Birns, S., Kim, B., Ku, S., Stangl, K. & Needell, D. <i>A Practical Study of Longitudinal Reference Based Compressed Sensing for MRI</i> . <i>CoRR</i> abs/1608.04728 . arXiv: 1608.04728 (2016). |

Invited Talks

- Summer 2024 | NSF IDEAL: Workshop on Machine Learning, Interpretability, and Logic
- Spring 2023 | NSF IDEAL: Workshop on Machine Learning, Interpretability, and Logic
- Spring 2022 | Simons Collaboration on the Theory of Algorithmic Fairness, supported by The Simons Foundation
- Spring 2022 | University of Illinois, Chicago Computer Science Theory Seminar

Leadership and Teaching Experience

- Fall 2019 | **Teaching Assistant** TTIC 31020 Introduction to Machine Learning (Graduate Level)
Fundamental of Machine Learning. Led recitations, gave office hours, and assisted students with programming assignments in python/numpy
- Winter 2019 | **Teaching Assistant** TTIC 31010 Algorithms (Graduate Level)
Won TTIC Outstanding TA Award
Course covers divide-and-conquer, greedy algorithms online algorithms, dynamic programming, game theory)
- Summer 2018 | **Teaching Assistant** Introduction to Machine Learning Summer School
Similar to TTIC 31020

Reviewing

- 2023 | AISTATS(International Conference on Artificial Intelligence and Statistics)
- 2023 | ICALP(International Colloquium on Automata, Languages and Programming)
- 2022 | ITCS (Innovations in Theoretical Computer Science)
- 2022 | FAACT (ACM Conference on Fairness, Accountability, and Transparency)
- 2022 | ICML Workshop: UpML 2022 – Updatable Machine Learning

Graduate Coursework-selected

- Fall 2017 | Introduction to Statistical Machine Learning
- Winter 2018 | Algorithms
- Spring 2018 | Introduction to the Theory of Machine Learning
- Spring 2018 | Natural Language Processing
- Spring 2018 | Special Topics in Operations: Mgt./ Mgt. Sci.-Online Learning
- Winter 2021 | Information and Coding Theory