Levi Kaplan

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Education

Bachelors, Northeastern University, Boston, MA   Sept. 2018 - May 2022
Bachelors of Science in Computer Science   GPA: 3.69/4.00   Honors Distinction

PhD, Northeastern University, Boston, MA   Sept. 2022 - Present
Candidate for PhD in Computer Science   GPA: 3.83/4.00
Advised By Alan Mislove

Research

* Indicates First Authorship

Measurement and Analysis of Implied Identity in Ad Delivery Optimization: ⤤   Oct 2022
Presented IMC 2022, won Distinguished Paper Award
- Used StyleGAN 2 to generate synthetic faces, discovering novel methodology to change only the demographics of the faces
- Ran Facebook ads containing stock people and synthetic faces
- Discovered that ads get delivered more to people with same demographics, except images of children delivered more to older women and images of young women more to older men
- Images of white people delivered less to Black usevrs supports need for diversity in advertisements - less diverse ads may not be shown to POC

Algorithms That "Don't See Color": ⤤   Jul 2022
Published in AIES 2022
- Investigated characteristics of Facebook's ad delivery for housing, credit, and employment ads
- Discovered that removal of demographic features from algorithm may not prevent biased outputs
- Findings used in 2022 HUD Settlement against Facebook ⤤

Data Deserts and Black Boxes: ⤤   2021-22
Published in Management Science
- Investigated equity of Data Broker coverage along demographic lines
- Performed large-scale data analysis and ML techniques to analyze coverage
- Discovered lower coverage/accuracy for historically marginalized groups

Work

Software Engineer, Veracode: 2020
- Six month Co-op as Back End Engineer for the Static Platform Team
- Contributed to large-scale microservice architecture development
- Developed a REST API using AWS to relay internal system health status

Research Assistant, Northeastern University: 2021
- Six month Co-op performing research on Algorithm Auditing and Fairness
- Worked under supervision of Dr. Alan Mislove and Dr. Piotr Sapiezynski
- Performed research used in *Data Deserts and Black Boxes* and *Measurement and Analysis of Implied Identity in Ad Delivery Optimization*

Technical Skills

Languages and Frameworks: Python (Pandas, NumPy, PyTorch), Scala, Java