Kartikeya Kandula

Education

Ongoing **Princeton University**, Center for Information Technology Policy (CITP)

Ph.D. in Computer Science in progress

Advisor: Prof. Jonathan Mayer

Research interests: Antitrust and Competition, Online Speech, Privacy

2019 - 2020 University of Michigan, College of Engineering

Master of Science in Engineering, Computer Science Engineering, GPA: 3.80

2016 - 2019 University of Michigan, College of Engineering, Summa Cum Laude

Bachelor of Science in Engineering, Computer Science Engineering, GPA: 3.81, Major GPA: 3.90

Research

Ongoing Google Self-Preferencing Study, In Progress

• Contributing evidence as to whether a subset of Google's marketing practices are anti-competitive

Ongoing Search Ballot Design Influence on Consumer Decisions, In Progress

• Researching the effects that search engine ballots have on promoting digital competition

Ongoing Online Content Moderation Bias Study, In Progress

• Investigating if Facebook content moderators exhibit inherent bias in moderating flagged posts

Winter UnclearBallot: Automated Ballot Image Manipulation, Conference Publication

2019 • Implemented attack showing that post-election image audits can be reliably defeated by an attacker

Work Experience

Summer Microsoft, Software Engineering Intern, Seattle

2020 • Worked on Azure App Services UX team responsible for the 3rd most used service on Microsoft Azure

Organized effort to normalize on accessibility across all Azure App Services experiences

• Created comprehensive end-to-end experience for deploying GitHub Actions integrated applications

• Developed single experience for all deployment tasks, enabled GitHub Actions container deployments

Summer Microsoft, Software Engineering Intern, Seattle

2019 • Worked on Excel desktop application for Apple macOS as part of Experiences and Devices organization

• Implemented and delivered new file recovery system that led to 13% drop in force quit rate for customers

• Converted file recovery dialog from interaction blocking modal window to message bar within application

Summer J.P. Morgan Chase, Technology Analyst Intern, Chicago

2018 • Engineered integrated portal for corporate loan providers with Java Spring web application framework

- Implemented GraphQL API to consolidate data from existing microservices and systems utilizing MyBatis to couple representational data objects with templated stored procedures and SQL statements
- Served as product manager, conducted customer interviews to develop wireframes for front-end design
- Employed Elasticsearch framework to create responsive search functionality for back-end of application

Publications

Oct. 2019 UnclearBallot: Automated Ballot Image Manipulation, Matthew Bernhard, Kartikeya Kandula, Jeremy Wink, J. Alex Halderman, Proceedings of the 4th International Joint Conference on Electronic Voting (E-Vote-ID '19)

Speaking Engagements

- Oct. 2020 Guest lecturer, UM EECS 183, "Tech Policy and Privacy"
 - Invited to give talk to over 1000 first year computer science students as part of lecture series aimed at exposing students to nontraditional topic in tech
 - Covered topic included why privacy matters, how users are tracked across the web, the causes and effects of algorithmic bias, and difficulties with regulation of tech
- Sept. 2020 Panel member, UM EECS Speaker Series, "Opportunities for Higher Education in EECS"
 - Invited to speak on panel of recent graduates from the University of Michigan EECS Department
 - Had public conversation with undergraduate students interested in pursuing graduate school
- Oct. 2019 Speaker, E-Vote-ID 2019, "UnclearBallot: Automated Ballot Image Manipulation"
 - Presented research to leading election security experts at The International Conference for Electronic Voting in Bregenz, Austria
- Aug. 2019 Speaker, DEF CON 27, "UnclearBallot: Automated Ballot Image Manipulation"
 - Presented research at largest hacking conference in the United States. The presented work was included in a report released by Representative Jackie Speier and Senator Ron Wyden at the U.S. Capitol Congressional Auditorium and Atrium that detailed findings to election administrators and policymakers

Teaching

- Spring 2020 Elementary Programming Concepts, Graduate Student Instructor, 800 students
 - Fall 2019 Elementary Programming Concepts, Graduate Student Instructor, 1000 students
 - Fall 2018 Discrete Mathematics, Undergraduate Teaching Assistant, 800 students

Extracurricular Activities

- 2018 2019 MPowered Entrepreneurship, Director
 - As director of University of Michigan's oldest and largest entrepreneurship organization, established startup consulting group and acquired portfolio of client companies including StockX, the fastest-growing startup in Michigan
 - May 2018 Capital One Software Summit Hackathon, 1st place
 - Developed web application, Kickback, that consolidates a user's financial history and uses previous transactions to recommend deals through a collaborative filtering engine
 - Presented to panel of Capital One Executive Vice Presidents and won competition of over thirty teams

Awards & Honors

- 2019 Summa Cum Laude, UM-Engineering, graduated with highest honors
- 2019 James B. Angell Scholar, UM Board of Regents, awarded for superior scholastic achievement
- 2016 2019 Dean's list, UM-Engineering, honor received every semester of undergraduate studies
- 2016 2019 University Honors, UM-LSA, honor received every semester of undergraduate studies
 - 2018 Inducted IEEE-Eta Kappa Nu, Beta-Epsilon chapter, national EECS honors society
 - 2017 J.P. Morgan Sponsored Scholarship, J.P. Morgan Chase
 - 2016 National Merit Scholarship, National Merit Scholarship Corporation