ASHWIN RAJADESINGAN

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SUMMARY

I'm a 4th year PhD student at the University of Michigan's School of Information. My broad areas of interest are computational social science and social computing. I am particularly interested in improving online political discussions by accounting for the role of social identities (such as partisan identity) in these discussions.

Fall 2017 - Present

GPA: 4.0/4.0

Fall 2014

EDUCATION

University of Michigan - Ann Arbor, MI

PhD student, School of Information

Specialization: Computational Social Science, Social Computing

Field prelim topic: Online Political Deliberation

Advisors: Ceren Budak and Paul Resnick

Arizona State University - Tempe, AZ

GPA: 4.0/4.0 MS in Computer Science

Specialization: Data Mining, Machine Learning

Thesis: Sarcasm Detection on Twitter: A Behavioral Modeling Approach

Advisor: Huan Liu

Vellore Institute of Technology - Vellore, India

Spring 2012 Bachelors in Computer Science and Engineering GPA: 8.91/10

Thesis: PhishAri: Automatic Realtime Phishing Detection on Twitter

Advisor: Ponnurangam Kumaraguru

RELEVANT COURSEWORK

SI - Experimental Methods: Designing Social Networks Experiments

SI - Social Media Studies: Theory & Research

SI - Practical Use and Communication of Bayesian Statistics

SI - Data Mining

SI - Research Methods

POLSCI - Identity and Conflict

COMM - Global Digital Cultures

TEACHING EXPERIENCE

2020 Winter, SI 664 - Building Interactive Applications

2020 Summer, SIADS 511 - SQL & Databases

2020 Summer, SIADS 516 - Big Data: Scalable Data Processing

RELEVANT SKILLS

Concepts:

Experimental design, observational causal inference, multilevel (hierarchical) modeling, sampling theory, topic modeling and machine learning algorithms

Languages:

Python, PySpark, R, SQL

AWARDS AND HONORS

- 2020, Facebook PhD Fellowship (Comp. Social Science), 2 year tuition support and 37,000\$ stipend
- 2019, ICWSM Best Paper Award
- 2014, ASU President's Award for Innovation (Team Member: TweetTracker)
- 2012, APWG eCRS Best Paper Award
- 2012, IEEE eCrime Fighter Scholarship

RESEARCH EXPERIENCE

University of Michigan, Ann Arbor MI

Fall 2017 - Present

PhD student

- I have predominantly focused on researching online political discussions and examining ways to improve them. I have studied how newcomers conform to toxicity norms in political communities (ICWSM 2020 paper). Currently, I am working on studying political discussions taking place in non-political online spaces and how increasing the salience of non-political social identities of participants may help improve political discussions.
- Though not my primary research focus, I am interested in understanding how offline social hierarchies such as caste get reproduced in online spaces (See ICWSM 2019 paper).

Microsoft Research, Bangalore, India

Summer 2019

PhD Intern, Advisor: Joyojeet Pal

- Quantifying the centrality of leaders in online political campaigns
 - Measured the centrality of leaders of different parties to MP candidates' Twitter political campaigns in India using references to leader in candidate tweets. Results suggest that the centrality of leaders to a campaign depends on the popularity of the leader in that state, popularity of the candidate on Twitter and the type of constituency (reserved or general) that the candidate is contesting in.

Arizona State University, Tempe AZ

Spring 2013 - Fall 2014

Graduate Research Assistant, Data Mining Machine Learning Lab

- (Master's Thesis) Inspired by social science research, devised a supervised learning framework to identify sarcastic tweets by modeling temporal, social and linguistic aspects of sarcasm.
- Contributed to TweetTracker, a tool to analyze emerging humanitarian assistance/disaster events through Twitter. Designed distributed MongoDB shards (and schema) optimized to enable fast storage/retrieval of hundreds of millions of tweets.

Indraprastha Institute of Information Technology, Delhi

Spring 2012

Undergraduate Research Intern, PreCog Lab

• (Undergraduate Thesis) Devised technique to detect phishing tweets using text mining, network analysis and supervised classifiers. Built a chrome extention to detect phishing tweets on Twitter.

INDUSTRY EXPERIENCE

Facebook, Menlo Park CA

June 2018 - August 2018

Research Analyst I

• Through a collaboration with the Center for Social Media Responsibility at the University of Michigan, helped to build a dashboard to display the amount of fake news (as labeled by third-party fact checkers) shared on Facebook.

Senior Data Scientist

• Built Doximity's news recommendation system: Developed multiple supervised/unsupervised models which perform functions including: clustering similar articles, identifying medical relevance and medical specialty relevance, recommending articles based on user topic interest from past article reads and collaborative filtering.

PUBLICATIONS

- Ashwin Rajadesingan, Paul Resnick, and Ceren Budak. "Quick, Community-Specific Learning: How Distinctive Toxicity Norms Are Maintained in Political Subreddits" Proceedings of the International AAAI Conference on Web and Social Media. ICWSM, 2020.
- Ashwin Rajadesingan, Anmol Panda, and Joyojeet Pal. "Leader or Party?: Personalization in Twitter Political Campaigns during the 2019 Indian Elections" Proceedings of the International Conference on Social Media and Society. SMS, 2020.
- [Best Paper Award] Ashwin Rajadesingan, Ramaswami Mahalingam, and David Jurgens. "Smart, responsible, and upper caste only: measuring caste attitudes through large-scale analysis of matrimonial profiles" Proceedings of the International AAAI Conference on Web and Social Media. ICWSM, 2019.
- Ashwin Rajadesingan, Reza Zafarani, and Huan Liu. "Sarcasm detection on twitter: A behavioral modeling approach." Proceedings of the Eighth ACM International Conference on Web Search and Data Mining. WSDM, 2015.
- Ashwin Rajadesingan, and Huan Liu. "Identifying users with opposing opinions in Twitter debates." International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction. SBP, 2014.
- [Best Paper Award] Anupama Aggarwal, Ashwin Rajadesingan, and Ponnurangam Kumaraguru. "PhishAri: Automatic realtime phishing detection on twitter." IEEE APWG eCrime Researchers Summit, 2012.
- Ashwin Rajadesingan, and Anand Mahendran. "Comment spam classification in blogs through comment analysis and comment-blog post relationships." International Conference on Intelligent Text Processing and Computational Linguistics. CICLing, 2012.

INVITED TALKS

- 2020, Facebook, Core Data Science group, "Quick, Community-Specific Learning: How Distinctive Toxicity Norms Are Maintained in Political Subreddits"
- 2019, University of Michigan, Connecting Digital Scholarship, "Conducting Student-led Interdisciplinary Projects"
- 2019, Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi), "Studying Caste in Online Matrimonial profiles"
- 2019, Jindal-U Oregon Forum: Media Culture & Politics, "Personalization in Twitter Political Campaigns in India"

MEDIA COVERAGE (SELECTED SOURCES)

- 2020, Utah Public Radio, UnDisciplined A science talk show where I opine about toxicity norms in Reddit political communities based on my 2020 ICWSM paper. (Episode: <u>Social Disorder</u>)
- 2019, Times of India, "Indian matrimonial sites show shift in attitude towards intercaste marriage"

• 2019, Michigan News, "Matrimonial website profiles show Indians more open to intercaste marriage"

SERVICE AND OTHER ACTIVITIES

- 2020, Mentor Graduate Rackham International (GRIN) students Mentoring Program
- 2019, Contributor "Being Brown: South Asian Narratives of Brownness in South East Michigan" an art exhibit showcased at the Hatcher Graduate Library, University of Michigan.
- 2019 present, Member Political Communication Working Group at the University of Michigan
- 2018 Coordinator Computational Social Science Reading Group at UMSI
- 2017, Community Partner Consultant A2 DataDive a program that matches data science experts with local non-profits to help with their data analysis needs.
- 2012, Presenter "Tamil FTW!: Tamil Youth Identity in Online Social Media" World Tamil Youth Conference, NUS Singapore