# ASHWIN RAJADESINGAN

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#### **EDUCATION**

University of Michigan - Ann Arbor, MI

Fall 2017 - Present

PhD student, School of Information

GPA: 4/4

Specialization: Computational Social Science, Social Computing

Advisors: Ceren Budak and Paul Resnick

Arizona State University - Tempe, AZ

Fall 2014 GPA: 4/4

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 GPA: 8.91/10

Bachelors in Computer Science and Engineering

Thesis: PhishAri: Automatic Realtime Phishing Detection on Twitter

Advisor: Ponnurangam Kumaraguru

# RELEVANT COURSEWORK

POLSCI - Identity and Conflict

SI - Experimental Methods: Designing Social Networks Experiments

SI - Social Media Studies: Theory & Research

SI - Practical Use and Communication of Bayesian Statistics

SI - Data Mining

#### RELEVANT SKILLS

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

Languages: Python, PySpark, R, MySQL

#### AWARDS AND HONORS

2020, Facebook PhD Fellowship (Computational Social Science)

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

Doctoral Student/Graduate Research Assistant

- 1. Depolarizing online conversations (ongoing)
  - Designing an online experiment to improve conversation quality by increasing the salience of cross-cutting social identities between conversing partisans in online political discussions.
- 2. Norm maintenance in online communities
  - Quantified the relative strength of norm conforming processes (self-selection, retention and socialization) in maintaining toxicity norms in online political communities.

- 3. Caste in social media
  - Identified factors that influence openness to intercaste marriage using data from online matrimonial sites.

# Microsoft Research, Bangalore

Summer 2019

PhD Intern, Advisor: Joyojeet Pal

- Identified the centrality of leaders of different parties using both text and image shared on Twitter by the candidates contesting in the 2019 general elections in India.
- Preliminary results show that candidates and grassroots workers of traditionally leader-based parties such as Shiv Sena campaigned more on party's name rather than the leader's name.

# Arizona State University, Tempe AZ

Spring 2013 - Fall 2014

Graduate Research Assistant, Data Mining Machine Learning Lab

- 1. Detecting Sarcasm on Twitter using Behavioral Modeling Approach (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.
- 2. TweetTracker 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

- Built a chrome extention PhishAri to detect phishing tweets on Twitter (Undergrad Thesis)
- Devised technique to detect phishing tweets using text mining, network analysis and supervised classifiers (92% accuracy).

### 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.

# Doximity, San Francisco CA

September 2014 - June 2017

Senior Data Scientist

- 1. Built 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.
- 2. Improved search relevance
  - Built query intent models and performed A/B testing to identify relevant attributes that should be boosted in ElasticSearch query models.

### **PUBLICATIONS**

- 1. **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.
- 2. 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.
- 3. [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.
- 4. **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.
- 5. **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.
- 6. [Best Paper Award] Anupama Aggarwal, Ashwin Rajadesingan, and Ponnurangam Kumaraguru. "PhishAri: Automatic realtime phishing detection on twitter." IEEE APWG eCrime Researchers Summit, 2012.
- 7. **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.

# SERVICE AND OTHER ACTIVITIES

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.

2017, Community Partner Consultant - A2 DataDive

2012, Presenter - "Tamil FTW!: Tamil Youth Identity in Online Social Media" World Tamil Youth Conference, NUS Singapore