

# Soham De

PHD STUDENT, UNIVERSITY OF WASHINGTON

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## EDUCATION

### University of Washington

PHD IN INFORMATION SCIENCE

Seattle, USA

Sep 2023 - 2028 (exp)

### Ashoka University

DIPASR: DIPLOMA IN ADVANCED STUDIES AND RESEARCH IN COMPUTER SCIENCE

Sonepat, India

Aug 2022 - May 2023

- Graduated Magna cum Laude with the Best Capstone Thesis Award

BSc (HONS) IN COMPUTER SCIENCE | 3.89/4.0

Aug 2019 - May 2022

- Graduated Magna cum Laude with a Gold Medal in Computer Science

## WORK EXPERIENCE

### University of Washington

RESEARCH & TEACHING ASSISTANT

Seattle, USA

Sep. 2023 - present

- Working with Martin Saveski on LLM-driven consensus and "bridging" algorithms for social media
- Conducting lab sessions and designing/grading assignments as a TA for Data Science for 40+ graduate students (Student Feedback: 4.6/5.0)

### Microsoft Research

RESEARCH INTERN

Bangalore, India

Jul. 2022 - Dec. 2022

- Studied quantitative characteristics of propaganda spread in real-life online social networks
- Used a mix of statistical analysis and qualitative interviews to study disinformation and effectiveness of fact-checks

### University of Michigan

RESEARCH INTERN

Remote

Dec. 2021 - Jun. 2022

- Analysed nature of interactions, polarization, and discourse among political influencers on Indian Twitter
- Used word embeddings, PCA, LDA, regression, clustering, and tools like Gephi

### Pint AI (formerly Mediacred)

ML RESEARCH INTERN

Bangalore, India

May. 2021 - Oct. 2021

- Conducted exploratory research into ML interventions for fake-news detection
- Implemented a novel Twitter-based article recommendation engine that generates a curated news feed

### MPhasis Lab (ML2CT)

RESEARCH INTERN

Sonepat, India

May. 2021 - Aug. 2021

- Implemented end-to-end PPML systems in C++ and Python on multiple large datasets
- Designed a novel algorithm for securely evaluating non-linear functions using arithmetic shares

### Ashoka University

3X UNDERGRADUATE TEACHING ASSISTANT

Sonepat, India

Fall 2020, Fall 2021

- TA for Foundations of Computer Programming, Computer Organisation & Systems and Software Debugging
- Conducted weekly discussion sections and office hours. Was responsible for designing and evaluating assignments for 200+ students across courses (Student Feedback: 4.75/5.0)

## RESEARCH EXPERIENCE

### ACADEMIC PUBLICATIONS

\* means equal contribution | Citation statistics on [Google Scholar](#)

#### 11. FeedSpan: A bridging-based prosocial feed reranking algorithm | 🏆 Winner (Top 3)

LUKE THORBURN, **SOHAM DE**, KAYLA DUSKIN, HONGFAN LU, SMITHA MILLI, MARTIN SAVESKI

Center for Human-Compatible AI

Ongoing

#### 10. Supernotes: Driving consensus in crowd-sourced fact-checking

**SOHAM DE**, MICHEL BAKKER, JAY BAXTER, MARTIN SAVESKI

Major Conference [redacted]

In submission

#### 9. Enhancing Crowd-Sourced Fact-Checking Using LLM-Driven Consensus

**SOHAM DE**, MICHEL BAKKER, MARTIN SAVESKI

IC<sup>2</sup>S<sup>2</sup> 2024

[Link to slides](#)

## 8. Networks and Influencers in Online Propaganda Events: A Comparative Study of Three Cases in India

ANIRBAN SEN, **SOHAM DE**, JOYOJEET PAL

ACM CSCW 2024

[Link to proceedings](#)

## 7. Influence and Political Leaning of Overlap between Propaganda Communities

ANIRBAN SEN, SOUMYASIS GUN, **SOHAM DE**, JOYOJEET PAL

ACM JCSS 2024

[Link to proceedings](#)

## 6. Social Media & Society in India

**SOHAM DE**, ARSHIA ARYA, DIVYA RAMESH, MEG YOUNG, JOYOJEET PAL

University of Michigan 2023

[Link to proceedings](#)

## 5. Experiences of Indian Journalists on Twitter in India | 🏆 Best Poster Award

**SOHAM DE\***, SUKHNIDH KAUH\*, JOYOJEET PAL

ACM SIGCHI HCI & Friends 2023

[Link to poster](#)

## 4. Sustaining Discourse in a Rumour Network on Twitter

**SOHAM DE**, ANIRBAN SEN, JOYOJEET PAL

IC<sup>2</sup>S<sup>2</sup> 2023

[Link to paper](#)

## 3. Closed Ranks: The Discursive Value of Military Support for Indian Politicians on Social Media

AGRIMA SETH\*, **SOHAM DE\***, ARSHIA ARYA, SUSHANT SINGH, STEVEN WILKINSON, JOYOJEET PAL

ICTD 2022

[Link to proceedings](#)

## 2. Note: Picking Sides: The #HijabBan discourse on Twitter

**SOHAM DE**, ANMOL PANDA, JOYOJEET PAL

ACM COMPASS 2022

[Link to proceedings](#)

## 1. DISMISS: Database of Indian Social Media Influencers on Twitter

ARSHIA ARYA\*, **SOHAM DE\***, DIBYENDU MISHRA\*, GAZAL SHEKHAWAT\* ET AL

AAAI ICWSM 2022

[Link to proceedings](#)

## HONORS & AWARDS

- 2024 **Prosocial Ranking Challenge Winner**, Center for Human-Compatible AI
- 2024 **Graduate Top Scholar Fellowship**, Information School, University of Washington
- 2023 **Best Capstone Thesis Award**, Department of Computer Science, Ashoka University
- 2022 **Gold Medallist**, Department of Computer Science, Ashoka University
- 2022 **Undergraduate Research Excellence Award**, Department of Computer Science, Ashoka University
- 2022 **Service Excellence Award**, Department of Computer Science, Ashoka University
- 2022 **Recognition for Outstanding Contribution**, Department of Computer Science, Ashoka University
- 2019-22 **Dean's List (every semester)**, Dean of Academic Affairs, Ashoka University

## OTHER ACTIVITIES

### Social Media and Society in India Conference (SMSI)

STUDENT ORGANISER/ CHAIR

- Organised the call for papers, poster presentation session, and guest invites for 2 years of the conference, hosted at the University of Michigan

University of Michigan

Apr. 2023, Apr 2024

### ACM CHI, ACM CSCW, IC2S2

REVIEWER/ STUDENT VOLUNTEER

- Peer-reviewed for various conferences and journals, such as the aforementioned. Student volunteer at CSCW 2023, 2024

Multiple Locations

2022 - 2024

### CANDID Research Group

FOUNDER AND STAFF RESEARCHER

- Started and helped secure funding for a new CS research group at Ashoka University for Analysis on Social Networks

Ashoka University

Apr. 2022 - Dec. 2023

### Academic Affairs Board

CS REPRESENTATIVE

- Worked with the Department of Computer Science, Ministry of Academic Affairs (SG) and the Academic Advisory Board

Ashoka University

Fall 2021, Spring 2021

### The CS Society

INTERIM PRESIDENT, HEAD OF DEVELOPMENT

- Conducted bi-weekly Workshops and Events for 70+ active members on Web-Development and Machine Learning

Ashoka University

Feb. 2020 - Jun. 2022

## SKILLS

- Programming** Python, R, C/C++, JavaScript,  $\LaTeX$ , Markdown, Assembly, SQL
- Frameworks** PyTorch, Keras, Tensorflow, OpenCV, React, Express, Flask, git
- Softwares** Gephi, NetworkX, Docker, Tableau, Atlas.ti, MS Excel

## REFERENCES

**MARTIN SAVESKI**  
**JOYOJEET PAL**  
**DEBAYAN GUPTA**

MSAVESKI@UW.EDU  
JOYOJEET@UMICH.EDU  
DEBAYAN.GUPTA@ASHOKA.EDU.IN

PhD Advisor at University of Washington  
Advisor and collaborator on multiple studies  
Capstone project/thesis advisor at Ashoka University