# Aatman Vaidya

@ aatmanvaidya.github.io

#### Education

Ahmedabad University, India B.Tech in Computer Science & Engineering Aug 2019 – Jul 2023

## Experience

Tattle Civic Tech, India []

Aug 2023 - Present

Data Engineer and Researcher

- > I help build citizen centric open-source tools and datasets to understand and respond to **online harms** and **abuse**.
- > I lead the development of Feluda, a configurable engine for analyzing multilingual and multimodal content. Feluda helps factcheckers and researchers in combating misinformation.
- > I build data pipelines to cluster large amount's of Audio and Video data into social media thematic labels like politics, humor, memes, devotional content etc. This work helps fact-checker's better understand, vizualize and analyze the content received on their helpline.
- > Worked with MLCommons to develop an AI safety benchmark dataset for hate and sex related crimes. As a part of this project, I also conducted a survey on evaluating Indic LLM's for natural language tasks and online harms.

### **Publications**

S=In Submission, C=Conference, W=Workshop, P=Poster/Demo, J=Journal, R=Report

Strategies to Mitigate Spread of Toxicity on a Social Network

<u>Aatman Vaidya</u>, Harsh Bhagat, Seema Nagar, Amit Nanavati [In preparation]

Analysis of Indic Language Capabilities in LLMs 🖹 S.1

Aatman Vaidya, Tarunima Prabhakar, Denny George, Swair Shah [In Submission]

[ArXiv]

AI Safety Benchmark Dataset for Hate and Sex Related Crimes in Hindi R.1

Report Submitted to MLCommons and work included in the AILuminate Safety Benchmark Dataset

The Uli Dataset: An Exercise in Experience Led Annotation of oGBV W.1

Arnav Arora, Maha Jinadoss, Cheshta Arora, Denny George, Brindaalakshmi...Aatman Vaidya, Tarunima Prabhakar Workshop on Online Abuse and Harms at North American Chapter of the Association for Computational Linguistics [NAACL'24]

★ Outstanding Paper Award

Analysing the Spread of Toxicity on Twitter

Aatman Vaidya, Seema Nagar, Amit Nanavati ACM International Conference on Data Science and Management of Data

[CODS-COMAD'24]

C.2 Forecasting the Spread of Toxicity on Twitter

Aatman Vaidya, Seema Nagar, Amit Nanavati IEEE International Conference on Cognitive Machine Intelligence

[ IEEE CogMI'23 ]

Overview of the 2023 ICON Shared Task on Gendered Abuse Detection in Indic Languages C.1

Aatman Vaidya, Arnav Arora, Aditya Joshi, Tarunima Prabhakar International Conference on Natural Language Processing

[ ICON'23 ]

## Work Mentions and Media Coverage

| Center for Democracy & Technology on "Moderating Tamil Content on Social Media" 💷                           | June 2025 |
|---|-----------|
| FOSS United on "Meet The Maintainers, 31 days 31 FOSS Maintainers from India" 💷                             | May 2025  |
| World Economic Forum on "Year of elections: Lessons from India's fight against AI-generated misinformation" | Aug 2024  |
| NY Times on "A Small Army Combating a Flood of Deepfakes in India's Election"                               | Jun 2024  |
| The Nieman Lab on "Indian journalists are on the frontline in the fight against election deepfakes" 🗉       | May 2024  |
| Digital Public Goods on "Safeguarding Information Integrity during Elections with Digital Public Goods"     | Apr 2024  |

#### **Talks**

| <b>Tech4Dev AI Cohort Program</b> on "Safety by Design in AI for Social Good Applications" <b>♀</b> | Remote, Jul 2025    |
|---|---------------------|
| MisinfoCon India'25 on "A Look at Open-Source Deepfake Detection" % ■                               | Bengaluru, Mar 2025 |
| AI for Global Development by Agency Fund on "Evaluating Indic Language Performance in LLMs" 🗞       | Bengaluru, Mar 2025 |
| Ahmedabad University SNA Guest Lecture on "Modelling Hate Speech on a Social Network" 🗞             | Ahmedabad, Apr 2024 |
| ACM Winter School on Network Science on "Building NLP classifiers to detect Hate Speech"            | Ahmedabad, Dec 2023 |
| <b>DEF India Digital Citizen Summit</b> on "Tools to respond to Online Gender Based Violence" ■     | Remote, Apr 2024    |

### Featured Academic Projects and Collaborations

#### **Modelling Spread of Hate Speech**

Aug'22 - Present

w/ Amit Nanavati, Seema Nagar

- > Worked on a novel model to capture the spread of hate speech on Twitter. Our model is based on user behaviour and captures two important factors: a) toxicity exists as a spectrum, i.e. hate is not binary, and b) toxicity is not conserved in a network.
- > An in-depth empirical analysis led us to find users change behaviour with time and is impacted by its neighborhood. Developing a model that captures this finer phenomenon gives insights into creating interventions to mitigate hate speech. [In Submission]

### Tracking Online Gender Based Abuse

Jul'23 - Present

at Tattle Civic Tech

- > Created a YouTube Dataset to track gender-based violence using a crowd-sourced slur list by Gender Right Researchers and Activists. String matching algorithms and NLP models were used to analyse text in Indic languages. [ ]
- > Help build Uli, a browser extension to redact slurs and abusive content.
- > Improved NLP systems to understand coded language (dog-whistle or double-meaning words).

#### Financial Scams on Social Media

Jun'25 - Present

w/ Kiran Garimella

> Working on mapping financial scams in India. How do they move cross-platform (from Instagram to Telegram etc), what type of content is getting pushed?

#### Awards and Honors

Outstanding Paper Award @ Workshop of Online Harms and Abuse NAACL 2024

Bosch Future Mobility Challenge | Semi-Finalist [ Programmed and Engineered an autonomous driving car to navigate a miniature city. One of the 24 teams out of 118, and only team to represent India for the finals in Cluj, Romania. [ ]

## Teaching and Academic Service

Reviewer: COLM'25, WOAH ACL'25, ACL Rolling Review'24

Discrete Mathematics (MAT 101), Ahmedabad University. Teaching Assistant

Winter 2022

Center for Learning and Empowerment (NGO), Volunteer Teacher.

Jul 2023 - Apr 2024

> Taught 20+ secondary school kids mathematics for an entire academic year, at a tribal village in Jharkhand, India.

**Programming Club**, Ahmedabad University. Content Head and Event Organiser 🕠

July 2020 - May 2022

Reading Club, Ahmedabad University. Organiser 🗘

Dec 2021 - May 2022

#### Skills

Research Areas Online Safety, Evaluation, Language Models & their Societal Impact, Content Moderation

**Languages** Python, JavaScript, Elixir C/C++, Kotlin, GraphQL

Frameworks PyTorch, Tensorflow, Nodejs, OpenCV, networkx, Elasticsearch, Phoenix

Technologies MySQL, PostgreSQL, Docker, AWS (S3, EKS, EC2), Kubernetes, CI/CD, Android Studio