# Aatman Vaidya

2 aatmanvaidya.github.io aatmanvaidya@gmail.com aatmanvaidya Google Scholar

# Education

Ahmedabad University, India

Aug 2019 - Jul 2023

B.Tech in Computer Science & Engineering

# Experience

Tattle Civic Tech, India [♀]Aug 2023 - Present

Research Engineer

- > I help build citizen centric open-source tools and datasets to understand and respond to online harms and abuse. [?]
- > Led the development of Feluda, a configurable engine for multilingual and multimodal content analysis to assist fact-checkers and researchers in combating misinformation. [•]
- > Contributed to Uli, a browser extension that redacts slurs and abusive language, archives problematic content, and counters online gender-based violence experienced by marginalized communities in India. [•] [•]
- > Contributed to the creation of the Deepfakes Analysis Unit, a WhatsApp-based tipline for detecting and responding to AI-generated synthetic media. I built scalable data pipelines to cluster large volumes of audio and video data into social media thematic categories, enabling more efficient analysis by fact-checkers. [ ]
- > Collaborated with MLCommons to develop an AI safety benchmark dataset focused on hate speech and sex-related crimes in India, created through a human-centered participatory approach with experts and advocates from marginalized communities. [ Dataset]
- > Contributed to Viral Spiral, an adaptive digital card game about sharing news on the Internet. The game reflects the ways and reasons misinformation is shared. [•] [•]
- > Worked with NGOs in the health and education sectors through Tech4Dev's AI Cohort program, implementing technical safety guardrails for AI Chatbot applications. [ ]

### **Publications**

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

S.3 Quantifying the Illicit Ecosystem of Betting Apps in India

<u>Aatman Vaidya</u>, Kiran Garimella In Preparation

S.2 Brainrot Analysis of Social Media Data

Omkar Kabde, <u>Aatman Vaidya</u>, Denny George *In Preparation* 

S.1 Strategies to Mitigate Spread of Toxicity on a Social Network

<u>Aatman Vaidya</u>, Harsh Bhagat, Seema Nagar, Amit Nanavati In Submission at **ICWSM 2026** 

P.1 Analysis of Indic Language Capabilities in LLMs

<u>Aatman Vaidya</u>, Tarunima Prabhakar, Denny George, Swair Shah

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

Mansi Gupta, Srravya Chandhiramowuli, Vamsi Pothuru, Saumya Gupta, Tarunima Prabhaka, Kaustubha K, <u>Aatman Vaidya</u> Report Submitted to <u>MLCommons</u> and work included in the <u>AlLuminate</u> Safety Benchmark Dataset

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

Arnav Arora, Maha Jinadoss, Cheshta Arora, Denny George, Brindaalakshmi...<u>Aatman Vaidya</u>, Tarunima Prabhakar Workshop on Online Abuse and Harms at North American Chapter of the Association for Computational Linguistics

★ Outstanding Paper Award

[NAACL'24]

C.3 Analysing the Spread of Toxicity on Twitter

<u>Aatman Vaidya</u>, 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

<u>Aatman Vaidya</u>, Seema Nagar, Amit Nanavati IEEE International Conference on Cognitive Machine Intelligence

[ IEEE CogMI'23 ]

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

<u>Aatman Vaidya</u>, 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

Tech4Dev AI Cohort Program on "Technical Implementation of AI Safety Guardrails" % 💷	Bengaluru, Sep 2025
<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

#### Financial Scams on Social Media

Jun'25 - Present

w/ Kiran Garimella

- > Performed an extensive quantitative analysis of the betting app ecosystem in India through a multi-faceted, mixed-methods approach.
- > Analyzed 20K Meta ADs, 10K Instagram Posts and 329K Google Play Store reviews to uncover patterns in promotion, user sentiment, and thematic content.
- > We systematically identify and quantify a range of harmful practices, including the use of misleading advertisements, deceptive celebrity endorsements, and illegal deepfakes designed to feign legitimacy.
- > Our analysis reveals that, despite platform policies and local laws, thousands of betting app advertisements persist on major social media networks.

#### Modelling Spread of Hate Speech

Aug'22 - Sep'25

w/ Amit Nanavati, Seema Nagar

- > Developed a network-based model to simulate the spread of toxicity on social media, treating users as transformers who amplify, attenuate, or replicate toxic content. [Full Paper @ CODS-COMAD'24]
- > Conducted a temporal and behavioral analysis of Twitter (100K users, 17.2M posts), Koo (215K users, 16.9M posts), and Gab (62K users, 20.1M posts) networks, constructing directed graphs of up to 2.3M edges to study how toxicity evolves across time.
- > Proposed and evaluated peace-bot interventions to mitigate online toxicity. We saw up to 11.6% reduction in total network toxicity depending on graph structure and bot placement strategy. [In Submission @ ICWSM'26]

### Tracking Online Gender Based Abuse

Jul'23 - Present

at/ Tattle Civic Tech

- > Created a dataset of 1.1M YouTube comments to track gender-based violence, leveraging a crowd-sourced Indic slur list curated by gender rights researchers and activists. [ ]
- > Fine-tuned NLP models (Llama Guard, Qwen Guard) to detect coded and dog-whistle language in Indian contexts by creating a multilingual dataset of 1,500+ Reddit comments. [•]
- > Developed media matching workflows with TMK and PDQ hashing and clustering pipelines for large-scale detection and visualization of harmful or misleading content.
- > Prototyped linguistic methods to identify duplicate or derived slurs and trace their root word origins for improved lexical content moderation. [ ]

# **Building AI Safety Guardrails**

Iul'25 - Present

w/ Tattle Civic Tech and Project Tech4Dev

- > Developed a RESTful content moderation API integrating lexicon-based slur filtering and Llama Guard model for real-time classification of harmful content. [ ]
- > Conducted workshops to present a taxonomy of AI Risks and Hazards to NGO's working in the health and education sector.

### **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: ICWSM'26, COLM'25, WOAH ACL'25, ACL Rolling Review'24 Shared Task: Gendered Abuse Detection in Indic Languages@ICON'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, AI Safety, 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