

EDUCATION

- **Ahmedabad University** July 2019 – June 2023
Bachelor of Technology in Computer Science and Engineering; GPA: 2.87/4

EXPERIENCE

- **Software Developer Engineer-I** August 2023 - Present
[Tattle Civic Technologies](#)
 - I work on a open-source browser extension called [Uli](#) that redacts abusive content, archive problematic content, and collectively push back against online gender based violence.
 - Programmed a feature that allows users to crowdsource slurs. Engineered RESTful APIs, designed and implemented the frontend, and managed the end-to-end development of the feature.
 - Conducted an analysis of state-of-the-art OCR techniques, including Large Vision Modles (LVM's), to detect text in images. Provided insights to advance claim extraction methodologies for detecting fake news in images with Indic languages.
- **Software Developer Intern** June 2022 - July 2022
[Genuin Inc.](#)
 - Developed apps using CameraX API, work manager, and coroutines.
 - Responsible to engineer a resilient method which captures video buffer reliably from live camera input.
- **Undergraduate Research Fellow** May 2021 - March 2022
[School of Engineering and Applied Science](#), Ahmedabad University
 - **Image Quality Index** - Worked with Dr. Keyur Joshi to build a Perceivable Image Blur Quality Index, aiding image classification using SSIM, MSE, and PSNR.
 - **Analysing COVID-19 Second Wave** - Worked with Dr. Shipla Pandit to study people's psychological and physiological effects and experiences in the second wave of COVID-19 with the help of data analysis. This work is [published](#) in the Journal of Psychological Research.
- **Teaching Assistant** June 2022 - July 2022
[School of Engineering and Applied Science](#), Ahmedabad University
 - Graded tests, assignments and took tutorial sessions for the course of Discrete Mathematics.

PUBLICATIONS

P=PREPRINTS, C=CONFERENCE, J=JOURNAL

- [C.2] **Analysing the Spread of Toxicity on Twitter** [\[paper\]](#)
[Aatman Vaidya](#), Seema Nagar, Amit Nanavati
ACM International Conference on Data Science and Management of Data [CODS-COMAD 2024]
- [C.1] **Forecasting the Spread of Toxicity on Twitter** [\[accepted\]](#)
[Aatman Vaidya](#), Seema Nagar, Amit Nanavati
IEEE International Conference on Cognitive Machine Intelligence [IEEE CogMI 2023]
- [P.1] **The Uli Dataset: An Exercise in Experience Led Annotation of oGBV** [\[paper\]](#)
Arnav Arora, ..., [Aatman Vaidya](#), Tarunima Prabhakar et al.
Pre-Print [ArXiv]
- [J.1] **Coping Resources of Young People Experiencing COVID-19 Second Wave, in India: A Preliminary Study** [\[paper\]](#)
Shilpa Pandit, Aatman Vaidya, Aangi Shah, Eshva Shah et al.
Journal of Psychosocial Research [JPR 2022]

TALKS & SHARED TASK

Invited Talk, Digital Citizen Summit *Speaker*

November 2023

> Panel discussion on “Building tools to respond to Online Gender Based Violence”.

Shared task on Gendered Abuse Detection in Indic Languages *Organizer*

Nov 2023 - Dec 2023

> Organised a shared task at 20th International Conference on Natural Language Processing (**ICON**) - India's flagship NLP conference.

Invited Speaker, ACM Winter School on Network Science *Organizer*

Dec 2023

> Talked on how to build a NLP classifier to detect hate-speech. Conducted a hands-on tutorial for 25+ students.

UNDERGRADUATE THESIS

Analysing the Spread of the Toxicity on Twitter - Proposed a novel model to capture the spread of hate speech on Twitter. Found that toxicity in a network is not conserved. To capture this spread of toxicity, we categorize users as Amplifiers, Attenuators, or Copycats. Our model successfully replicates the increase in toxicity in simulated (Barabási-Albert graphs) and real-world networks.

Extended this work by looking at toxicity as a time series and used Transformers along with Graph CNN's to forecast the spread of toxicity on Twitter.

ACHIEVEMENTS

- **Bosch Future Mobility Challenge** - Programmed and Engineered an **autonomous driving car** to navigate a miniature city. One of the 24 teams out of 118, and **only team** from India selected for the finals in Cluj, Romania. Devised path planning algorithms, optimised object detection.
- **Ingenious Hackathon 3.0** - Won the Open-Source Track. Build a website for peer-to-peer file transfer.

PROJECTS

- **Ambutrack** - Uber for Ambulances. Helps an ambulance reach faster to a patient. The app is made in Java and Android Studio.
- **Sentiment Analysis of Online Harassment Towards Women Wrestlers** - Created a YouTube **Dataset** to track gender based violence using a crowd-sourced slur list. Used string matching algorithms and ML models for Indic languages to do text analysis.
- **Coronary Artery Disease Prediction** - Developed a supervised machine learning model using k-NN and Logistic Regression classifiers to predict an individual's 10-year future risk of Coronary Artery Disease.

SKILLS

Languages:	Python, C/C++, JavaScript, Kotlin
Frameworks/ Libraries:	PyTorch, Tensorflow, Nodejs, OpenCV, networkx, CameraX, Sequelize ORM
Databases and Developer Tools:	MySQL, MongoDB, Git, GitHub, Android Studio, Firebase, Docker

EXTRA-CURRICULAR ACTIVITIES

- Android Study Jams Facilitator, conducted 3 sessions teaching Android Development in Kotlin to 40+ students.
- Committee member at Programming Club. Co-organized and curated 30+ Web Development, Machine Learning, and Technology events.
- Teacher at Center for Learning Empowerment - I teach secondary school kids mathematics.
- Student Ambassador - Worked at the Office of Undergraduate Admissions and assisted Campus Tours.
- Volunteer at Humankind - Created Educational Content for underprivileged people in Ahmedabad on Hygiene and Money. Investing.