

# ARCHIT RATHOD

[Website](#) [Email](#) [LinkedIn](#) [GitHub](#) [Scholar](#)

## EDUCATION

**University of Mumbai (Thadomal Shahani Engineering College)**

Bachelor of Engineering in Information Technology

August 2020 – June 2024 (Exp.)

Agg. CGPA 9.37 / 10

## EXPERIENCE

**Digital Information Research Lab, Boston University**

January 2024 – Present

Research And Development Engineer

Remote (Boston)

- Working on a applied research project at the intersection of psychology, technology, and market dynamics under Prof. Marshall Alstyne.
- Leading virtual marketplace experiment with dual-role users (producers/consumers) using Empirica.ly and React.js, overseeing diverse advertising options and consumer engagement.

**SimPPL**

March 2023 – Present

Research and Web Engineer

Remote (New York)

- Utilized YouTube Data API to analyze videos, extracting insights and creating network graphs for visualization. Automated data collection, processing, and storage through pipelines on virtual machines using Google Cloud Platform.
- Modified website structure, incorporating multiple pages and implemented a dynamic news segment. Deployed the website on Vercel and conducted API testing. [Live](#)
- Successfully contributed to a grant proposal accepted by YouTube Research, resulting in a 5x increase in the organization's API limit.

**Kaizen Future Tech**

June 2021 – July 2021

Research Intern

Mumbai, Maharashtra

- Built IoT projects using Arduino and Node MCU CPUs on virtual software like TinkerCAD and Proteus. Learnt Arduino Programming in C/C++ and different sensors used in solving real-life problems.
- Worked on automation tasks for detecting natural calamities by intersecting IoT and Deep Learning.

## RESEARCH AND PUBLICATIONS

A. Surve, A. Rathod, M. Surana, G. Malpani, A. Shamraj, S. Sankeppally, R. Jain, S. Mehta, **Multi-Agent Simulators for Social Networks** – Multi-Agent Security (MASEC AI) Workshop, NeurIPS 2023 [ArXiv](#)

A. Rathod, V. Pariawala, M. Surana, K. Saxena, **Leveraging CNNs and Ensemble Learning for Automated Disaster Image Classification** – Springer Book Series 'Algorithms for Intelligent Systems', ICSISCET, 2023 [ArXiv](#)

M. Parker, N. Patil, A. Rathod, M. Surana, A. Surve, P. Banerjee, R. Jain, S. Mehta, **Deploying Large Language Model Chatbots for Indic Languages in Low-Resource Regions** Working Paper, November 2023

M. Surana, V. Pariawala, A. Rathod, J. Tiwari, S. Shaikh, **Cross Lingual Text-to-Video Synthesis of Press Information Releases** – Working Paper, November 2023

## PROJECTS

**Attire.AI** | Stable Diffusion, LoRA, LLama, VGGNet, ZoeDepth, Fast API, Next.js, Tailwind

[GitHub](#)

- A conversational fashion outfit generator that enables users with interactive features such as adding clothing items to images and receiving tailored fashion recommendations using Generative AI.
- Offered a dynamic fashion experience through a canvas interface and chatbot, allowing users to explore, enhance, and innovatively personalize their fashion choices.

**Social Vision** | TF-IDF, Support Vectors, LSTM, Fast API, Tweets Dataset, Next.js, Tailwind, MongoDB

[GitHub](#)

- Developed a graph-based model to identify coordinated inauthentic behavior on Twitter by connecting users who consecutively post the same content within a time threshold.
- Implemented agenda and propaganda detection of coordinated Twitter networks, achieving 94.6% accuracy, along with fake news identification with an F1-Score of 93.1%.

**Ascend.AI** | Librosa, OpenCV, LLama, Next.js, Tailwind, MongoDB

[GitHub](#)

- It aims to revolutionize interview preparation by leveraging an audio sentiment analysis model with an accuracy rate of 81%, aiming to boost communication skills and confidence.
- Incorporated real-time feedback and video mock interview evaluations to provide a personalized coaching experience, achieving an accuracy rate of 97.2%.

## TECHNICAL SKILLS

**Languages:** Javascript, Typescript, Python, C++, HTML

**Tools/Frameworks:** Numpy, Pandas, Sklearn, OpenCV, React.js, Node.js, FastAPI, Next.js, Git, Github, jQuery, Tailwind

**Databases:** MySQL, MongoDB, BigQuery, Neo4j

**Devops:** Vercel, Google Cloud Platform(GCP), Docker, Vertex.AI

## EXTRACURRICULAR ACTIVITIES

Participation in 10+ hackathons and won in 6 of them.

[Certificates](#)

Conducted a React.js Crash Course named 'React Zero-to-Hero' under the HoD of IT department.

[Details](#)

Gave an invited talk at a Fellowship backed by Google Research and Mozilla on the YouTube Data Project.

[Details](#)

Created an Open Source Project to learn Data Structures and Algorithms in a fun way.

[Demo](#)