# **Anirudh Vishal Khatry**

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#### **EDUCATION**

### Veermata Jijabai Technological Institute, Mumbai, India (VJTI)

May 2021

Secured a Bachelor of Technology in Information Technology

(CGPA 8.97/10)

Relevant coursework: Machine Learning, Data Mining Technologies, Artificial Intelligence, Soft Computing Technologies, DBMS, Cloud Computing, Compiler Design, Software Analysis and Design.

#### PROFESSIONAL EXPERIENCE

#### Microsoft Research Lab, Bangalore, India | Research Intern

July 2021 – Present

- Closely working with Microsoft Edge team for web-based data extraction tasks to improve product purchasing experience.
- Employing techniques to combat low-resource name entity recognition tasks by employing ML and program synthesis techniques
- Devised LRSyn, a state-of-the-art interpretable data extraction framework, robust to version changes in data.
- Spearheaded the clustering and landmark detection tasks, and developed a novel fingerprinting technique for images.
- Successfully published our research paper titled "Landmarks and Regions: A Robust Approach to Data Extraction" at PLDI 2022, San Diego.

#### Omdena (in collaboration with Human Rights First), Remote | Machine Learning Intern

May 2021– July 2021

- Collaborated with over 30 changemakers globally to develop an MVP for Human Rights First to track war crimes using social media platforms.
- Worked in close collaboration with the data collection team for data cleaning and annotation tasks.
- Recommended various transformer models for sentiment analysis and war crime classification (Binary and Multilabel).
- Deployed a binary classification RoBERTa model to detect war crimes on the HRF AWS server.

#### Samsung R&D Institute, Bangalore, India | Research Intern

May 2020– July 2020

- Teamed with the On-device AI team on multi-agent Reinforcement Learning for various methods to improve collaboration between power and performance agents.
- Implemented the amalgamation of methodologies suggested by various research papers like dynamic reward functions and time awareness.
- Built a Double Deep Q-Network, employing Prioritized Experience Replay.
- Designed a pursuit-evasion simulation game using PyGame for proof of concept.

#### Pexabyte Technology Solutions Pvt. Ltd., Chennai, India | Programmer Analyst Intern

May 2019– July 2019

• Coordinated with the product development team to build an ERP application for manufacturing and service-based industries. Employed JavaFX for the development of the application and MySQL for database management.

### ACADEMIC PROJECTS

#### **Multimodal Detection of Depression**

- Developed a machine learning tool that detected the presence of depression in an individual using Audio, Video, and Text features.
- Employed various feature engineering techniques to highlight behavioral aspects and focus on domain-guided learning.
- Proposed an amalgamation of ensemble-based visual model and deep learning-based voice and text models, to develop a state-of-the-art approach with low latency and better metrics.
- Analyzed results across the proposed models from Audio-Visual Emotion Recognition Challenge (AVEC), 2017.

## Email for the visually impaired

- Worked on a system that helped the visually challenged to access emails using an interactive voice response (IVR) system.
- Integrated the system with Gmail API and employed various other pre-existing Google APIs such as Text-To-Speech and Speech-To-Text.
- Implemented the system in accordance with various HCI principles and enhanced usability.

### **Covid-19 Twitter Sentiment Detector**

- Designed a sentiment detection tool that scraped tweets with the covid-19 hashtag and predicted sentiments over them.
- Successfully performed exploratory data analysis and found various underlying trends in data using tools such as heatmaps, histograms, word clouds, etc.
- Proposed an LSTM architecture for the classification task and obtained 90% accuracy in sentiment classification tasks.

### TECHNICAL SKILLS

• Programming Languages: Python, Java, C#, SQL (MySQL, Postgres), Javascript, HTML/CSS | Frameworks: Node.js, Django, Bootstrap | Others: Machine Learning, Deep Learning, NLP, PROSE, Computer Vision

# **EXTRACURRICULAR ACTIVITIES**

- Governed delegate affairs and determined rules for MUN as the Director-General, VJTI Model United Nations, 2020.
- Scored teams on parameters like fluency, rebuttals, and specificity as Debate Judge, Hysteria debate competition, 2020.
- Led a team of 30 PR executives and officers to organize guest lectures as Public Relations Head, Pratibimb, VJTI, 2020.
- Conducted MUN workshop for students at the Institute of Chemical Technology (ICT), Mumbai. Mentored the students of ICT regarding model UNs, teaching them various rules of procedure and tips on how to win various accolades in 2020.