# Venkata Sri Harsha Maddirala

#### **EDUCATION**

#### Master of Science in Computer Science, University of Texas at Dallas

08/2022 - 05/2024 | Dallas, USA

- Cumulative GPA 3.8; Specialization in Data Science
- Relevant Courses: Machine Learning, Statistical Methods for Data Science

# **Bachelor of Technology in Computer Science,**

08/2017 - 05/2021 | Sri City, India

Indian Institute of Information Technology, Sri City

• Relevant Courses: Computer Vision, Deep Learning, High Performance Computiing, Data Analytics.

#### **SKILLS**

Languages (Python, Java, C, C++, Javascript, Typescript, SQL, R, HTML)

Libraries and Technologies (TensorFlow, TFJS, Keras, PyTorch, Spark, Azure, AWS Lambda, Sci-kit learn, NLTK, Git)

Frameworks (Angular, NodeJS, ReactJS, SpringBoot, Django, MongoDB, MySQL, Flask)

#### **WORK EXPERIENCE**

# **Software Engineer,** ShopConnect ∅

07/2021 – 07/2022 | Bangalore, India

- Worked on developing a video-call based e-commerce application.
- Used Angular framework to develop robust single-page applications.
- Utilized MongoDB for the database and NodeJS for the backend to handle API requests.
- Applied ML techniques to optimize the user-uploaded images and built the statistics board to view the data analytics of each product.
- Integrated Instagram Graph API from scratch to publish and moderate content on the user's Instagram profile through which users can publish the content in less than 5 seconds with a single click.
- Deployed 6 clients to production after customizing the application according to their needs.
- Enhanced the application's features, fixed the bugs, and improved the overall performance by reducing the latency of more than 20 APIs by at least 30%.

#### **PROJECTS**

# Tweet Analysis ∂

- A logistic regression model has been trained on 1.6 million tweets and observed an overall accuracy of 79%.
- Used Angular to develop the front-end, where users can give search queries using keywords or dates, and sentiment analysis of all the tweets filtered by the query is shown.
- Deployed using **Azure serverless** architecture and Github actions for continuous integration and delivery (CI/CD).
- Used **Azure Functions** for the back-end and developed an API to pull the tweets based on the query given by the user and relay the data to an azure flask function that would predict the sentiment.
- Predicted data is sent back to the client browser and displayed with a pie chart. Access here ℰ

### **Curating News with NLP ⊘**

- Applied NLP is used to find how particular news is portrayed in different newspaper mediums.
- Scraped the articles from 4 major news outlets in India using the Beautiful Soup package.
- Used NLTK module for tokenization and filtered the content by removing common words.
- Developed web app using Django and used MySQL as DBMS, to display similar news articles from each outlet.

#### **Egocentric action recognition**

- A person's hand action is recognized by using the feed from a camera mounted on his glasses.
- Used optical flow and temporal flow as inputs to the LSTM network to detect the actions.
- Observed 73% accuracy when using the GTEA dataset.

#### **ORGANIZATION EXPERIENCE**

# Member, Gradient club, IIITS

• Part of a team that organized monthly coding challenges and promoted the club at Tech Fest (Abhisarga).