# Vijay Kumar Reddy Gade

# Experience

### DBYDX Technologies Private Limited | Data Science Intern

April 2022 - April 2023

- Developed AI tools with **Scikit-learn** and **Numpy**, improving data processing by 40% and enhancing analytics, while collaborating with analysts to integrate these tools seamlessly into existing systems.
- Enhanced user engagement by 50% through **NLP** improvements using Wit.ai for intent detection and entity extraction. Collaborated with user experience teams to align enhancements with user demands and business objectives.
- Developed models for Quora's Question Similarity task, improving response accuracy and user engagement with adaptable thresholding and clear interpretability.

# Market Data Forecast | Software Developer-Intern (as a Final Year Student) | April 2021 - March 2022

- Key team member in developing a cutting-edge HR Management System, pioneering transformative features for onboarding, attendance tracking, and performance evaluations, significantly enhancing HR processes for 300+ employees.
- Efficiently integrated WhatsApp into marketing campaigns, enhancing direct communication with the audience.
- Optimized WhatsApp integration, increasing message throughput from 40 to 1000 messages per second through caching and architecture redesign.

## **Projects**

#### **Drowsiness Detection System:**

- Developed a drowsiness detection system with 95% accuracy using DLIB for facial analysis to improve road safety.
- Utilized facial landmarks and EAR with advanced algorithms for precise drowsiness level measurement and timely alerting to prevent accidents.

COVID-19 detection from chest X-ray images: 1. a deep learning classifier that takes an x-ray image as the input and assigns the input image to one of the four classes: COVID-19 positive, Normal, Lung Opacity, Viral Pneumonia. 2.an image segmentation network to segment the left and right lungs from the x-ray images.

Face Recognition Attendance System (at SCSVMV Univ. for CS Dept.): Implemented Face Recognition Attendance System using Convolutional Neural Networks(CNNs) to ensure precise face recognition with an exceptional accuracy rate exceeding 95%.

Characterizing Acoustic Eavesdropping for Electromagnetic Signals: Working on acoustic eavesdropping via electromagnetic signals using smartphone cameras, employing CNN and wav2vec 2.0 models on the HyperGator platform to advance cybersecurity defenses and enhance digital communication privacy.

#### **Technical Skills**

**Programming:** Java, Python, R, C++

Libraries: SimpleITK, Scikit-learn, Keras, Numpy, TensorFlow, Pytorch, Pandas, NLTK

Models and Techniques: Neural Networks, Regression, LLM, GAN, Decision Trees, Transfer Learning

Methodologies: Git, Linux, Image Processing, Natural Language Processing, Information Retrieval, Machine Learning,

Data Structures and Algorithms, Object-oriented Programming

Databases: SQL, Database design and Management

#### Certifications and Achievements

- Python (Basic) at <u>Hackerrank</u> (got 5 star coder badge).
- "Google Cloud Fundamentals: Core Infrastructure" and "IT Security: Defence against the digital dark arts" on Coursera.
- Freelancing experience as Computer Science Subject matter expert at Chegg India Pvt. Ltd.(May 2022 March 2023)

#### Education

## University of Florida

August 2023 – August 2025

Master of Science in Computer Science

Courses: Analysis of Algorithms, Advanced Data Structures, Distributed Operating System Principles, Computer and
Information Security, Computer Networks, Mobile Computing

#### Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya

July 2018 - July 2022

Bachelor of Engineering in Computer Science and Engineering; GPA: 3.57 (8.93/10.0)

Courses: Data Structures and Algorithms, Computer Networks, Database Management Systems, Object Oriented

Programming, Computer Vision, Machine Learning