Vamsi Krishna Boddapalli

Tempe, AZ, USA • vamsikrishna80940@gmail.com• 480-619-8325 • LinkedIn • Github • Portfolio

EDUCATION

Master of Science in Robotics, Concentration in Artificial intelligence August 2024 - May 2026
Arizona State University, United States CGPA: 3.5/4.0

Masters in Computer Science and Engineering August 2019 - June 2024
Vellore Institute of Technology, India CGPA: 3.5/4.0

TECHNICAL SKILLS

Programming / Scripting Languages: Python, C/C++, R, Java, JavaScript, TypeScript, SQL, Bash, HTML/CSS.
Tools: Docker, Linux, AWS (EC2, S3), Google Cloud, Hadoop, MySQL, PostgreSQL, MongoDB, NoSQL, Tableau, Git, JIRA.
Frameworks & Libraries: TensorFlow, PyTorch, Scikit-learn, Apache Spark, Pandas, NumPy, Flask, React.
Data Science Skills: Deep Learning, Neural Networks, Machine Learning, Model Training, Feature Engineering, Data Cleaning.
Coursework: Data Visualization, Machine Learning, Data Processing at Scale, Statistics for Data Analytics.

PROFESSIONAL EXPERIENCE

Machine learning Engineer | Corizo February 2024 – August 2024

- Designed and deployed a **deep learning model** using **TensorFlow** and **PyTorch** to automate **classification and outcome prediction**, reducing manual analysis time.
- Implemented **Python scripts** for **data preprocessing**, **model training**, and **performance evaluation**, ensuring an efficient **training pipeline** and organized results.
- Visualized **model performance** and generated **daily insights** using **HTML**, **JavaScript**, and **CSS** for effective **team communication**.
- Developed and integrated **API endpoints** using **Flask**, facilitating **seamless data transfer** between components and ensuring real-time processing.
- Deployed the model on **AWS EC2 instances** with **Docker containers**, streamlining **model accessibility** and **scalability**.
- **Optimized data pipelines using Apache Spark for faster batch processing and parallel data analysis.**

Research Work | Vellore Institute of Technology May 2023 – January 2024

- Engineered a **hybrid deep learning model** integrating **CNN** and **ANN** for **lung cancer prediction**, enhancing **diagnosis accuracy.**
- Trained and validated the model using a **large, diverse dataset**, ensuring robust performance across varied cases.
- Utilized **Python** and **TensorFlow** for **data preprocessing**, **model training**, and **evaluation** to support **reliable patient risk identification**.
- Leveraged **Scikit-learn** for **data transformation** and **performance benchmarking**, optimizing model predictions.
- Deployed **interactive dashboards** using **Tableau** for real-time **visualization of diagnostic metrics**, improving **insight dissemination** to healthcare professionals.

PROJECTS

Cotton Disease Prediction | Python, TensorFlow, CNN

- Developed a **deep learning model** for **accurately predicting and classifying cotton diseases** using **CNNs**, improving **diagnosis accuracy**..
- Collected and preprocessed data from **diverse sources** using **Pandas** and **NumPy**, creating a robust dataset for **model training**.

Fake Product Review Monitoring System | Python, NLP, Sentiment Analysis

- Implemented a **machine learning model** using **NLP** and **sentiment analysis** to identify and **filter fake product reviews on e-commerce platforms**.
- Fine-tuned the model with **Scikit-learn** to maximize **accuracy** and minimize **false positives**, enhancing the **quality of online reviews**

Collab - Medical Consultation Platform | React, Node.js, MongoDB

- Led the development of a **full-stack web application** for **medical consultation**, enabling **real-time communication between patients and healthcare professionals**.
- Built a **scalable back-end** using **Node.js** and **MongoDB**, incorporating **secure data handling** and **authentication for user data protection**.

PUBLICATIONS

Hybrid Pulmonary Predictive Model: ResearchGate - Thesis and Poster