

Nandini Thimmireddy Gari

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Summary

Graduate student in Computer Science with a strong passion for software development, IT systems engineering, and Assurance of quality. Experienced in application development, management of IT systems, and advanced analytics. Proficient in using programming, data visualization, and cloud tools to provide effective solutions.

Experience

Machine Learning Intern, Vosyn | *Python, Docker, GCP* Feb 2025 – Present

- Designing and implementing scalable ML pipelines for automating model deployment and updates, enhancing model management and performance in production.
- Working on Text-to-Speech (TTS) voice cloning projects, utilizing GCP and Cloud Storage Buckets to store and manage large datasets while ensuring seamless deployment and monitoring of models in a cloud-native environment.
- Collaborating with cross-functional teams to ensure efficient model integration into production and developing strategies to monitor and maintain model performance.

Data Analyst Summer Intern, Apollo Hospitals Pvt, Ltd. | *Python, Power BI, Excel* May 2024 – Aug 2024

- Conducted competitive intelligence analysis for pharmacy operations, sourcing, and analyzing large data sets to improve operational efficiency. Optimized inventory management processes using advanced analytics.
- Designed visual analytics presentations with Power BI that facilitated strategic discussions among stakeholders, resulting in identified opportunities to address the two main inefficiencies affecting pharmacy operations: inventory management issues and order fulfillment delays.

Undergraduate Researcher, SRM University, AP | *Data Science, Predictive Analytics* Jan 2022 – May 2023

- Compared the performance of machine learning models using a combination of different class imbalance and dimensionality reduction techniques to improve churn prediction. Reduced return rates by 10%, saving \$75K for the organization. Overhauled legacy source code, improving usability and reducing runtime by 50%.
- Published the research paper "A Comparison of Various Class Balancing and Dimensionality Reduction Techniques on Customer Churn Prediction" at **IEEE 7th International Conference on Recent Advances and Innovations in Engineering**. The link to the paper: [10.1109/ICRAIE56454.2022.10054321](https://doi.org/10.1109/ICRAIE56454.2022.10054321)

Projects

Deep Learning-Based Image Classification | *Python, Tensorflow, Keras, Streamlit* Dec 2024

- Engineered a high-performance image classification pipeline using **EfficientNetB0 and MobileNetV2**, integrating pre-trained models with custom dense layers, global average pooling, and dropout to enhance feature extraction
- Built an end-to-end automated workflow in TensorFlow, streamlining data preprocessing, augmentation, model training, and evaluation, **achieving 92.5% accuracy with 0.91 F1-score**.

AI in Architecture: Self-Organizing Plans | *Generative AI Models* Apr 2024

- Contributed to a term project focused on creating self-organizing architectural floor plans using advanced machine learning models, including **GNN, GAN, and VAE**
- Enhanced the overall effectiveness of automated floor plan generation by integrating GAN and VAE models, demonstrating the potential of these technologies in advancing computational design for architecture

AI-Powered Face Detection & Recognition | *Python, OpenCV, Streamlit, Flask* Jan 2024

- Developed an advanced facial recognition system using OpenCV and Face Recognition libraries in Python, **achieving 80% accuracy in real-time multi-face detection**.
- Integrated machine learning-based classifiers and feature extraction techniques, enhancing security applications such as biometric authentication and AI-driven online exam proctoring.

Education

New Jersey Institute of Technology, MS in Computer Science, **GPA: 3.8/4.0** Sep 2023 - Dec 2024

SRM University, B. Tech, Computer Science with Big Data Analytics, **GPA: 8.76/10** Jun 2019 – May 2023

Technologies

Programing: Python, R, JavaScript, HTML, CSS, PHP, Java, Django, C#

Libraries/Frameworks: Sklearn, Pandas, Plotly, Mathplotlib, TensorFlow, Keras, PyTorch, NLP, OpenCV, Flask, Streamlit

Tools/cloud: MySQL, Excel, Power BI, Tableau, Hadoop, AWS, Docker, FastAPI, GitHub, Selenium

Certifications: IBM Data Analyst Specialization, Google Data Analytics Certificate