AVS NARAYANA

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PROFILE SUMMARY

Computer Science graduate with a specialization in Artificial Intelligence and Machine Learning, equipped with strong skills in Python, TensorFlow, scikit-learn, and Django. Experienced in developing and deploying real-world AI applications, including disease prediction systems and deep learning models. Proven ability to lead collaborative projects, implement end-to-end ML pipelines, and build full-stack web applications. Passionate about leveraging data science and AI to drive innovative solutions in healthcare and automattion domains

Education

Tirumala Engineering College, Narasaraopet, AP *Aug 2021 – May 2025*
Bachelor of Technology in Computer Science (AI-ML)

- CGPA: 7.2 / 10

Oxford Vit Academy, Narasaraopet, AP *Aug 2019 – May 2021*
Intermediate (MPC)

- Percentage-91.8%

Oxford High School, Narasaraopet, AP *Apr 2019*
Class 10 SSC

- Percentage-94%

Experience

AI/ML/DS Intern *Aug 2023 – Nov 2023*
International Institute of Digital Technologies

- Assisted in preprocessing and analyzing over 100,000 real-world data records using Python libraries like Pandas and NumPy, ensuring clean datasets for machine learning models
- Supported the development of end-to-end AI/ML solutions by working with a cross-functional team of engineers and mentors, contributing to data handling and model building stages
- Applied feature selection and dimensionality reduction techniques (PCA, Variance Threshold) to improve training efficiency and boost model performance by 25%.
- Implemented supervised learning algorithms such as Logistic Regression, Random Forest, and XGBoost, learning to optimize them using GridSearchCV and cross-validation methods.
- Practiced model versioning and collaborative development using Git, Google Colab, and Jupyter Notebooks, gaining hands-on experience in managing machine learning workflows.

Certifications

Deep Learning Specialization – NPTEL 2023

Machine Learning Fundamentals – Indian Institute of Petroleum and Energy 2023

Python for Data Science – HackerRank 2022

Projects

AI Image Classifier & Forecasting Projects (Club Work)

- Led a team of 12 peers in building **image classification** and **time-series forecasting models** for real-world use cases like traffic prediction and defect detection
- **Mentored** students in foundational topics including **CNNs, RNNs, and model evaluation metrics**
- Implemented **modular codebases** and enforced PEP8 guidelines for maintainable, scalable project devel-

opment.

- Applied **data augmentation (e.g., flipping, rotation, brightness adjustment)** to increase **dataset variability**, leading to a **15% boost in model generalization**
- **Achieved 95% accuracy**, outperforming standard CNN baselines; conducted rigorous evaluation using **precision, recall, F1-score, and confusion matrix**.
- **Utilized transfer learning** to reduce training time while maintaining high performance across multiclass classification tasks

Sugarcane Leaf Disease Detection using Deep Learning

- **Designed and deployed** deep learning models using **MobileNet** and **EfficientNet** architectures to accurately classify sugarcane leaf diseases
- **Collected, annotated, and preprocessed** a dataset of 5,000+ high-resolution images using **OpenCV** and **TensorFlow**'s image pipelines

Skills

Programming Languages: Python, C, Java, C++

Data Science & Analytics : scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, Feature Engineering, EDA, Hyperparameter Tuning

Deep Learning Frameworks : TensorFlow, Keras, PyTorch

Machine Learning & AI : Supervised Learning, Neural Networks, Classification, Regression, Data Augmentation

Tools & Platforms: : Git, GitHub, Docker, Jupyter Notebooks, Google Colab, Django Admin, Visual Studio Code, PyCharm