Krishna Anvith Vattikuti

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EDUCATION

New Jersey Institute of Technology   Newark, NJ
Master of Science   Expected May 2026
Major in Data Science
Cumulative GPA: 3.33/4.0
Relevant Coursework: Data Analysis, Software Engineering; Operating Systems; Algorithms; Artificial Intelligence

Lovely Professional University   Punjab, India
Bachelor's of Technology   July 2020 - July 2024
Major in Computer Science and Engineering
Minor in Data Science (AI and ML)
GPA: 7.2/10

TECHNICAL EXPERIENCE

UpGrad   Punjab, India
Data Science Intern   January 2024 – May 2024
- Architected ML pipelines utilising Scikit-learn and TensorFlow on real-world datasets, which decreased data preprocessing time by 30% and accelerated the model training lifecycle.
- Integrated a HAR system achieving 97.53% accuracy, reducing false positives by 10% by identifying and fixing the main causes of mis-classification, ultimately improving fall detection systems.
- Streamlined feature engineering processes within the machine learning pipeline, culminating in a 20% reduction in model-training time and a 30% improvement in data processing efficiency.

TekWissen Software   Visakhapatnam, India
Computer Vision & IoT Summer Intern   May 2023 – August 2023
- Engineered a real-time plant disease evaluation pipeline using TensorFlow and OpenCV, achieving 92% accuracy in identifying common diseases, and enabling a 2x faster response.
- Created automated scripts for plant disease image augmentation pipeline, generating 5,000+ synthetic images weekly to enhance dataset diversity, improving model accuracy by 15% and saving 10 hours weekly.
- Rearchitected key components of TensorFlow Lite, delivering a verified 2x acceleration in inference speed and enabling real-time plant disease evaluations; documented the process for future interns.

PROFESSIONAL PROJECTS

Explain The Machine Learning Models   May 2025
- Automated the generation of SHAP summary plots and waterfall visualizations for a machine learning model, enabling the identification of 5 previously undetected data quality issues within the first month.
- Diagnosed and remediated eight data quality anomalies utilizing SHAP-based visual diagnostics within one month, contributing to more robust model performance and generating findings to fix the three biggest causes of crashes.
- Delivered a reusable dashboard module for plug-and-play SHAP support across classification models, visualized 1000+ feature importances weekly, contributing to faster model iterations and enhanced decision-making.

EHR & Predictive Analytics for Environmental Health   January 2025
- Optimized feature selection within the HAR system, leading to a 5% increase in frame processing speed and a 7% reduction in computational resources needed for real-time analysis.
- Predicted city-level Environmental Health Index using Gradient Boosting and Random Forest ($R2 = 0.83$).
- Created a series of 5 geospatial plots using Python's Geopandas library displaying disease outbreak hotspots; visualizations were integrated into the Department of Health's emergency response system, improving response times.
- Delivered a reproducible ML pipeline ready for weekly updates and real-time deployment.

UrbanSound8K: Environmental Sound Classification   May 2025

- Standardized audio feature extraction by converting 8,732 audio clips into Mel-spectrograms and MFCCs, improving consistency across datasets and reducing data preparation time by 20%.
- Developed CNN and DNN models achieving up to 76% accuracy on 10 urban sound categories.
- Reduced overfitting in image classification models by implementing data augmentation strategies, including random rotations and flips, demonstrably improving the F1 score by 12% on unseen data.

AWARDS & RECOGNITIONS

National Service Scheme, LPU   Punjab, India
Head of Division   March 2022 – May 2024
- Received official recognition from the Ministry of Youth Affairs and Sports, Government of India, for outstanding contributions to social service initiatives.
- Dedicated 470+ hours to diverse community service projects, increasing awareness of critical social issues, such as public sanitation, and promoting preventative healthcare at the grassroots level.
- Spearheaded a series of four educational workshops focused on environmental sustainability, empowering 100+ community members with practical skills and knowledge to implement eco-friendly practices at home.

ADDITIONAL

Technical Skills: Python, SQL, HTML, CSS, PyTorch, Scikit-learn, Power BI, Tableau, Mysql, NLP, Deep Learning, TensorFlow, Apache Spark
Languages: Fluent in English
Certifications & Training: Neural Networks and Deep Learning, Google Data Analytics, Advanced SQL for Data Scientists
Awards: Got recognised by Indian Government for 500+ hours of National Service