

Jeshmitha Gunuganti

[LinkedIn - Jeshmitha Gunuganti](#)

jeshmitha.gunuganti@gmail.com

+1 (513)-837-7098

Education

Master of Science, Computer Science - Data Science, - University of Cincinnati, USA

Aug. 2021 – Present

Courses: Intelligent Data Analysis, Big Data Analytics, Advanced Algorithms, Machine Learning, Information Retrieval CGPA: 3.8/4.0

Research Thesis [Video Processing Lab]: Unsupervised Video Summarization with Adversarial Graph-based Attention Network

- Developed an automatic video summarization model by combining attention mechanism with graph modeling techniques and by using VAE-GAN(Variational Autoencoder - Generative Adversarial Network) architecture with transformer encoder.
- Achieved state-of-the-art result compared to the existing unsupervised methods.

B.Tech, Computer Science - VNR VJIE, India

CGPA: 4.0/4.0 Aug 2017 - July 2021

Secured **2nd Prize at V-IGNITE Nationwide Hackathon** for a machine learning project named - “**Engine Failure Prediction**”.

- An end-to-end system that predicts any machine malfunction weeks ahead by tracking live data from sensors, and automatically turns-off the machine without any human intervention while sending notification to the owner.

Work Experience

Teaching Assistant, University of Cincinnati

Jan. 2022 – Present

- “Intro to Applied Artificial Intelligence & Machine Learning Tools” : Jan 2022 - July 2022
- “Data Structures” & “Cloud Computing” : Aug 2022 - Present
- Graded student projects & assignments, hosted weekly office hours, lab sessions to solve student queries in machine learning and programming concepts.

System Development Engineer Intern, Amazon.com, Inc.

Jan. 2021 – July. 2021

AWS | Python | Java | Front-end web development

Hyderabad, INDIA

- Developed an automation tool that gives insights from metrics during Service Performance Testing, which reduced the analysis time significantly from 30 mins to 1 min.
- Enhanced the Incident Resolver Automation tool to solve the tickets issued from MonitorPortal.

Machine Learning Engineer [Innovation Team], Qvantel Software Solutions

Jan. 2020 – Jan. 2021

AWS | Machine Learning | Python | Terraform | Data Visualization

Hyderabad, INDIA

- Performed social media trend analysis using AWS and visualized the generated data using QuickSight.
- Built a Chatbot and integrated analytics tools to get deep insights into customer experience.
- Established a virtual call center and performed sentiment analysis on caller interaction.

Machine Learning Research Intern, International Institute of Information Technology

Oct. 2019 – Dec. 2019

Machine Learning | Android App Development | Flask | Python

Hyderabad, INDIA

- Developed an end-to-end system for “Prognostic System Health Management” by building an android application to monitor and predict the machine’s health condition that could help the industry environment by providing advanced alerts.
- Analyzed the performance of various algorithms - Decision Tree, XGBoost, SVM and KNN.

Projects & Research Experience - Publications

Speech Emotion Recognition - Deep Learning, Python

[Published Paper - DOI](#) “Capsule Network based Speech Emotion Recognition for efficient capturing of spatial features”, ICAICR 2021.

- Extracted MFCC features from audio recordings and trained the CapsuleNet & CNN-LSTM deep learning models.
- Achieved state-of-the-art 94.01% performance accuracy with the CapsuleNet model, which outperformed traditional models.

Flight Delay Prediction - Machine Learning, Python

[Published Paper - DOI](#) “Machine Learning Model-based Prediction of Flight Delay.”, IEEE - 4th International Conference on ISMAC.

- Developed a model to predict the arrival delay of flights at the destination airport using supervised ML algorithms - XGBoost and Regression models.

Technical Skills

Main skills :

Python, PyTorch, AWS, ML Libraries - Numpy, Pandas, Scikit-learn, Matplotlib.

ML concepts :

Supervised, Unsupervised, Recommender systems, Reinforcement learning.

Deep Learning concepts :

CNN, RNN, LSTM, Attention, Transformers, GNN(Graph Neural Networks), GAN(Generative Adversarial Networks).

Data visualization tools :

PowerBI, Tableau, Quicksight.

Other skills :

C, C++, Java, Flask, SQL, Cloud Computing, Data Structures & Programming.

Certifications :

- Data Science For Engineers - IIT Madras
- AI For Everyone - deeplearning.ai
- Applied Machine Learning In Python - University Of Michigan.