Gowtham Venkata Sai Ram Maddala

+1(934) 246-9689 gowthamvenkata.maddala@stonybrook.edu LinkedIn GitHub

EDUCATION

Stony Brook University, Stony Brook, New York **Aug 2024 - Dec 2025**
*Master of Science in **Data Science**, Courses: Natural language Processing, Data Analysis, Probability*

International Institute of Information Technology, Bangalore, India **Apr 2023 - Dec 2023**
Advanced Certificate Programme in Data Science with Specialization in NLP *CGPA*: ***3.8/4***

Koneru Lakshmaiah Education Foundation - KL University, Hyderabad, India **Sept 2017 - May 2021**
Bachelor of Technology in Computer Science with specialization in Data Science *CGPA*: ***9.02/10***

TECHNICAL SKILLS

Programming Languages: C, C++, Java, Python, JavaScript, MATLAB, MySQL, MongoDB, R Programming
Frameworks and Libraries: TensorFlow, Keras, NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, PyTorch
Machine Learning: Predictive Modeling, GBDTs, Random Forests, Clustering, Time Series Forecasting
Natural Language Processing: Word Embeddings, Transformers, Text Processing, LLMs - Mistral, LLaMA, GPT

EXPERIENCE

Soroco **Feb 2024 - Jul 2024**
Software Engineer (Machine Learning) — **Azure DevOps, Python, Docker, Pytest, SQL, APIs** *Bangalore, India*

- Developed 4 Flask APIs to generate flowgraphs of user activities based on screens used for the Workgraph product.
- Leveraged Guidance library to format outputs from LLMs, significantly minimizing the need for post-processing.
- Optimized model size and compared performance between Mistral-7B and LLaMA2, reducing inference time from 5 seconds to 0.8 seconds while maintaining a balance between accuracy and speed.
- Designed the test cases using **PyTest**, ensuring smooth functionality of **APIs**, and validated JSON outputs using Postman.
- Boosted company revenue by **15%** through successful onboarding of **3 Fortune 500 clients** in a timeframe of **4 months**.

Awone.ai — Client: Carelon Global Solutions **Apr 2023 - Feb 2024**
Data Scientist — **Python, Bert, DBSCAN, Predictive Modelling, Tensorflow, PCA** *Hyderabad, India*

- Developed a Jira ticket analysis using **BERT and DBSCAN** for effective clustering of ticket summaries and descriptions.
- Converted these text into 200-dimensional vectors using BERT and applied **DBSCAN clustering** on the embeddings.
- Predicted resolution time using **polynomial regression** with **Lasso** regularization, achieving an R-squared value of **0.89**.
- Automated workforce assignment and resource allocation based on cluster analysis, **reducing operational costs by 30%**.

Ivy Comptech **Aug 2021 - Feb 2022**
Software Engineer — **MySQL, Java** *Hyderabad, India*

- Managed a high-volume transactional database with over 3 million records as part of the wallet/payments team.
- Optimized 30 complex SQL queries, reducing execution time by **30%** and significantly boosting data pipeline performance.

Telescope (Voxlogic.inc) — Acquired by Meta **Jul 2020 - Dec 2020**
Software Development Intern (AI Platform Team) — **Python, TensorFlow, APIs** *Sunnyvale, USA - Remote*

- Architected a conversational search solution using the TAPAS model from Hugging Face, enabling numerical question answering on tabular data extracted through a custom web scraping pipeline, achieving 97.45% accuracy.
- Integrated the model into Slack, allowing users to input tabular data and receive real-time responses, and quantized the model using TensorFlow to optimize for speed, ensuring swift responses during conversational searches.
- Contributed to the development of Telescope, which was later acquired by Meta for **$2.4 million** in 2021.

PROJECTS

Ola Driver Churn — GitHub

- Engineered a high-performance driver churn prediction model for Ola using **XGBoost**, achieving **0.97 precision, recall, and 0.98 AUC score**, by analyzing key features such as income, total business value, and quarterly ratings.
- Conducted feature analysis and engineering on Ola driver data, implementing **KNN-based imputation and target encoding** to optimize model performance and identify primary factors influencing driver retention.

Summarizing news articles using LSTMS — GitHub

- Implemented a many-to-many LSTM model to generate summaries from 60,000 news articles, improving performance by stacking additional LSTMs and applying dropout, achieving a ROUGE-L score of 0.72.