# Gowtham Venkata Sai Ram Maddala

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### **EDUCATION**

Stony Brook University, Stony Brook, New York

Aug 2024 - Dec 2025

Master of Science in Data Science, GPA: 3.84/4

International Institute of Information Technology, Bangalore, India

Apr 2023 - Dec 2023

Advanced Certificate Programme in Data Science with Specialization in NLP, GPA: 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, GPA: 9.02/10

### TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, HTML, CSS, JavaScript, R, MATLAB, SQL

Tools and Platforms: Git, Docker, Kubeflow, Flask, FastAPI, Google Cloud Platform (GCP), Microsoft Azure
Frameworks and Libraries: TensorFlow, PyTorch, Keras, NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, CUDA
Machine Learning Predictive Modeling, GBDTs, Random Forests, Clustering, LLMs (LLaMA, GPT, Mistral)

### 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.
- Trained YOLOv9 on annotated screenshots to enable the model to accurately detect interacted fields on user's screens.
- Leveraged the Guidance library to format LLM outputs, reducing post-processing needs, and optimized Mistral-7B and LLaMA2 models, cutting average inference time from 5 seconds to 0.8 seconds without compromising quality.
- $\bullet \ \ Designed \ the \ test \ cases \ using \ \textbf{PyTest}, \ ensuring \ smooth \ functionality \ of \ \textbf{APIs}, \ and \ validated \ JSON \ outputs \ using \ Postman.$
- 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

 $\mathbf{Aug}\ \mathbf{2021}\ \textbf{-}\ \mathbf{Feb}\ \mathbf{2022}$ 

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 — OGitHub

- 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 — OGitHub

• 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**.