# Jayanth Dasamantharao

NJ - 08901 +1 (848)-313-5617 dasamantharao.jayanth@rutgers.edu
linkedin.com/in/JayanthDasamantharao github.com/JayanthDasamantharao

## EDUCATION

**Rutgers University**, *Masters in Data Science, GPA:3.5/4* *Sept 2022 - May 2024 | New Brunswick, NJ*

**Relevant Coursework:** Statistics: Statistical Modeling & Computing, Stat Learning; Neural Networks, Machine Learning, Data Structures & Algorithms(Python), Data Wrangling (R), NLP, Data Mining. Projects Overview: Portfolio.

**Andhra University,** *2017 - 2021 | Visakhapatnam, India*

*Bachelor of Technology in Electrical & Electronics Engineering*

**Research Paper:** Self Driving Cars Using Image Processing and Deep Learning.

## TECHNICAL SKILLS

**Programming:** Python(problem-solving), R, Scala, Linux **Quantitative Analysis:** ggplot(R), Tableau, Statistical Modeling, Probability and Inference, Hypothesis testing, Bayesian Statistics, Predictive Modelling, SAS.

**Deep Learning(DL):** Convolutional & Deep Neural Networks(DNN), NLP, LLM's, Computer Vision, AI, BERT, GANs.

**Machine Learning (ML):** Regression, Time Series methods(ARIMA,LSTM), Ensemble Methods, Gradient Boosting trees.

**ML & DL Tools:** Pandas, Numpy, TensorFlow, NLTK, Keras, Hugging Face Transformers, spaCy, Pytorch, OpenCV, Yolo.

**Data Engineering:** SQL, Data Warehousing, Hadoop, AWS(Athena,Redshift,Lambda,S3), GCP(BigQuery, Cloud Storage, Dataproc), Snowflake. **Data Visualization:**PowerBI, Tableau, Seaborn, Plotly, Shiny, Matplotlib, Seaborn, Data Wrangling.

## PROFESSIONAL EXPERIENCE

**Data Science Intern**, *Harvest Software Solutions, LLC* *June 2023 - Sept 2023 | Jacksonville, Florida*

**Real-time Ad Campaign Optimization:**

- **Real-time Data Extraction using API's:** Extracted data from Aniview and CMCBeacons via APIs. Managed 5M+ rows, performed EDA, and incorporated CPM for critical performance evaluation.
- **Data Analysis:** Utilized visualization, summary stats, and hypothesis testing for insights into ad campaign performance.
- **Predictive Modeling:** Developed **XGBoost for predictive modeling** achieving low MSE. Applied **5-fold cross-validation to prevent overfitting.**Utilized H2O's AutoML for automated model selection,
- **Automation and Techniques:** Used **AutoML for automated tasks**, like feature engineering and hyperparameter tuning, selecting the optimal model for CPM prediction. Evaluated software applications to enhance automation processes.

**Application Development Associate**, *Accenture Solutions Pvt Ltd* *June 2021 - Aug 2022 | Hyderabad, India*

**Database Analyst, Regeneron Inc - Client Data Analysis & Warehousing**

- **Data Analysis:** Utilized **Athena and Redshift for client data analysis**, identifying two-thirds of integrity exceptions and improving process efficiencies. Implemented **ETL for efficient data handling**, reducing support calls by 50%
- Designed Python **pandas data pipelines to automate scripts**, resulting in a 50% reduction in support calls and ensuring efficient storage and maintenance of customer campaigns.
- Proficiently used **JIRA** to manage Agile development projects, creating, prioritizing, and updating tickets for seamless cross-functional collaboration.
- **Data Warehousing:** Conducted **business analysis for customer data warehousing**, resulting in improved data warehousing, enhanced data accuracy, and a significant reduction in data processing duration.
- Formulated **SQL queries using SQL Workbench** to meet business needs, thereby enhancing data quality and precision. Executed technological solutions, including DDL updates and the **deployment of data into production servers**.

## RESEARCH PROJECTS

**[Probabilistic Graphical Models, Bayesian Networks, PyMC3, Informative Prior Distributions]**
Developed Bayesian logistic regression models using PyMC3 to predict diabetes status, incorporating informative priors. Evaluated performance with recall and f1-score metrics, comparing outcomes between uniform and normal distribution priors. *Bayesian Classification on Diabetes data.*

**[Hugging Face transformers, Naive Bayes, Logistic Regression, BERT, N-Grams, GloVe embeddings]**
Led Language Identification employing Naive Bayes, Logistic Regression, and DistilBERT, achieving an 89% baseline accuracy globally. Leveraged DistilBERT, enhancing precision to 94%, and incorporated n-grams analysis for a more nuanced understanding of linguistic patterns. *Language Identification.*

**[PostgreSQL, MongoDB, Python, Sorting techniques, Search Engine Optimization, Django]**
Created a user query-responsive tweet retrieval system by integrating dual databases: Postgres for user data management and MongoDB for tweet storage. Optimized data storage and retrieval efficiency by 35% while implementing advanced caching strategies for superior system performance. *Twitter Search Application.*