VENKATA SIVA NAGA BABU T

Email: **siva1b3**@gmail.com   +91-9440665336

PROFESSIONAL SUMMARY

- Having 2 years of experience in the field of Data engineering and data analysis , mainly worked on creating **backend logics in the reporting webserver**, **creating complete workflow of the data from front end to data base**, has a good experience in micro services and database administration

- Experienced in facilitating the entire life cycle of a data science project: **Data Extraction**, **Data Pre-Processing**, **Feature Engineering**, **Dimensionality Reduction**, **Algorithm implementation** and **Validation**.

- Adept at analysis of **Missing data** by exploring **correlations** and similarities, introducing **dummy variables** for **missingness**, and choosing from imputation methods such **iterative imputer** on Python.

- Proficient in **data manipulation**, **Data preparation**, **Normalization** and **Predictive modeling**. Improved efficiency and accuracy of the model in Python.

- Expert in writing production quality code in **SQL**, **R**, **Python**. Hands on experience building **regression and classification models** and other **unsupervised learning algorithms.**

- knowledge in data visualization with **Microsoft power BI** creating line and **scatterplots, Bar-charts, Histograms, Pie-chart, Dot-charts, Boxplots, Error Bars, Multiple Charts types, Multiple Axes, subplots** etc. Able to use mathematics and applied statistics with visualization.

- Expert knowledge in **supervised learning** and **unsupervised learning algorithms** such as **Ensemble Methods** (**Random forests**), **Logistic Regression**, **Regularized Linear Regression**, **SVMs**, **Deep Neural Networks**, **Decision Trees** and **KMeans**.

- Competent in Evaluating Models performance using **A/B Testing**, **K-fold cross validation, R-Square, Confusion Matrix, ROC plot, Gini Coefficient and Grid Search**

- Proficient in building interpretable machine learning models, and end to end data pipelines which included extracting, transforming and combine all incoming data with the goal of discovering hidden insight, with an eye to improve business processes, address business problems or result in cost savings.

- Capable in working with large data sources; interpret and communicate insights and findings from analysis and experiments to both technical and non-technical audiences.

- Experienced with Python libraries including **NumPy, Pandas, SciPy, Scikit-Learn, statsmodels, MatplotLib, Seaborn, NLTK** and R libraries like **ggplot2, dplyr.**

- Experience in Web Data Mining with Python's **ScraPy** and **BeautifulSoup** packages along with working knowledge of **Natural Language Processing (NLP)** to analyze text patterns.

- Adept with Python and OOP concepts such as **Inheritance, Polymorphism, Abstraction,** etc.

TECHNICAL SKILLS

Statistics/ML	**Exploratory Data Analysis:** Univariate/Multivariate Outlier detection, Missing value imputation, Histograms/Density estimation, Auto-EDA in python **Supervised Learning:** Linear/Logistic Regression, Lasso, Ridge, Decision Trees, Ensemble Methods, Random Forests, Support Vector Machines, Deep Neural Networks **Unsupervised Learning:** Principal Component Analysis, K-Means **Feature Engineering:** Stepwise, Recursive Feature Elimination, Filter Methods, Wrapper Methods **Statistical Tests:** Hypothesis Testing, Z-score, CI, t-tests, Chi-Square Fit test, Auto Correlation tests**.** **Sampling Methods:** Bootstrap sampling methods and Stratified sampling **Model Tuning/Selection:** Cross Validation, AUC, Precision/Recall, Grid Search and Regularization
Languages / Libraries	**Python:** pandas, numpy, scikit-learn, scipy, pyspark, statsmodels, matplotlib, seaborn, tensorflow **Auto-EDA:** DataPrep, pandas-profiling, dtale, autoimpute, sweet-viz **R:** caret, catools, mass, sqldf, dplyr, ggplot, car, e1071, cowplot **SQL:** Subqueries, joins, DDL/DML statements
Databases/ETL/Query	MySQL, PostgreSQL
Data Visualization	Microsoft power BI, matplotlib, seaborn
Cloud Technologies	Amazon Web Services

WORK EXPERIENCE

Job Title: Data engineer/analyst

Company: Quberoot analytics LLP

Duration: Nov 2021 – present

- Creating Data work flows and data warehousing, managing database.
- Creating backend and front-end web server logics, stored procedures and scheduling jobs and backups for the application.
- Creating DL model extracts data from pdf and sends the data to the data base server.
- Analyzing database and find out performance of the various elements for the optimization of application.

Job Title: Assistant professor

College: Deveneni Venkata Ramana & D H R Mic College of Technology

Duration: July 2019 – January 2021.

- Training and placement cell in charge of the department.
- Member of Internal Quality Assurance Cell in the MIC College.

PROJECT WORK EXPERIENCE

Automated the calibration and validation process of simulation models using python:

- Worked mainly in Python and PTV Vissim during my Master's degree project. With the help of Python, I automated the calibration and validation process of a Roundabout model created in Vissim by using win32com.Client package and other data science modules like Scipy and Numpy.
- **Project Title:** Identifying The Effective Type of Roundabout Based on Traffic Conditions using Simulation modelling in PTV VISSIM.
- **Description:** Micro-Simulation Modeling of Roundabouts done using PTV VISSIM. The main outcome of the project is to find the efficiency of roundabout and to increase the efficiency of roundabout by introducing new layouts.
- **Applications:** This type of simulation projects mainly used to find the efficiency of upcoming new developments, and also used while converting existing intersection into roundabout. This type of planning will help in creating efficient traffic flow.

CERTIFICATIONS

- Python boot camp
- Python for everybody course authorized by University of Michigan
- MySQL boot camp
- Master in Microsoft Power BI boot camp
- Data science and Machine learning boot camp

ACADEMIC QUALIFICATIONS

Course	Institution	Year of Passing	Percentage / CGPA
M.tech (**Traffic And Transportation Planning**)	National Institute of Technology(**NIT**) Calicut	2019	7.9
B.tech (Civil engineering)	Velagapudi Ramakrishna Siddhartha Engineering College	2017	8.52

PERSONAL STRENGTHS

- Positive attitude
- Sincere and hard working
- Committed to Lifelong learning
- Ability to work under pressure
- Reliable and Consistent

OTHER INFORMATION

- Qualified GATE in first attempt with 633 SCORE
- Excellent Problem Solving Skills
- Adaptability to any kind of environment