SOWMYA YELLA

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EDUCATION

M.S., Information Technology and Management — **Richardson, TX**
The University of Texas at Dallas — August 2022 – May 2024

- **Coursework:** Object Oriented Programming in Python, Advance statistics for data science, Database Foundations for Business Analytics, Spreadsheet Modeling and Analytics, and Big data.

Bachelor of Engineering., Computer Science and Engineering — **Hyderabad, India**
Sreyas Institute of Engineering and Technology- Hyderabad — July 2018 – July 2022

Activities/Societies: ITMSLC, Infinity Lion's Club

KNOWLEDGE AND SKILLS

Java |Javascript| Python | C | R | HTML| MySQL, SQL, Postgres | SAS Base | AWS| Tableau | PowerBI | NumPy | Pandas | Scikit Learn |TensorFlow | Matplotlib | Machine Learning| Advanced MS Excel |Ubuntu, Linux| Agile Methodologies.

Certifications: Data Analytics and Visualization Job Simulation, AWS Cloud Practitioner Essentials, Tableau for Data Scientists, Machine Learning with Python, Introduction to Data Science by Cisco, Introduction to Data Analytics, Data Analytics Essentials by Cisco.

EXPERIENCE

Void Main Technologies — *February 2022 – June 2022*
Web Application Developer — *Hyderabad, India*

- Built a high-precision machine learning model for air quality prediction, employing Python, NumPy, Pandas, and Scikit Learn attaining a notable 92% accuracy and effectively reducing community health risks.
- Promoted model accuracy by 12% through detailed analysis, cleansing of extensive air quality datasets, and implementing noise reduction techniques.
- Demonstrated exceptional predictive accuracy in air pollutant levels, with an R-squared value of 0.85, a mean absolute error of 0.12, and a root mean squared error of 0.15, indicating a robust fit with observed data.

MetaFin Consulting India Pvt. Limited — *July 2020 - January 2022*
Data Analysis Consultant — *Hyderabad, India*

- Automated tax data analysis using Python scripts and SQL databases, resulting in a 10% increase in client satisfaction.
- Leveraged PowerBI and Tableau to craft intuitive tax dashboards, presenting key metrics and compliance trends to clients, leading to a 12% improvement in client engagement.
- Enhanced tax filing accuracy by 15% through data-driven decision-making and process optimizations, resulting in increased client trust and satisfaction, and a 20% reduction in client complaints.

ACADEMIC PROJECT EXPERIENCE

Intelligent EV Charging Network Platform — *January 2024 – May 2024*

- Launched predictive maintenance model using ML algorithms (regression, time series) in Python (sci-kit-learn, TensorFlow), resulting in a 12% increase in charging station availability.
- Managed and analyzed charging station data using relational databases PostgreSQL and MySQL, ensuring efficient data storage, retrieval, and analysis, resulting in improved metrics tracking and informed decision-making processes.
- Collaborated with cross-functional teams to integrate cloud services like AWS for hosting predictive models and scalable backend infrastructure, contributing to a 10% reduction in downtime and enhancing charging station reliability.

Revitalizing Patient Tracking: ABGH Digital Upgrade — *August 2023 – December 2023*

- Spearheaded a comprehensive digital transformation initiative at Alpha Beta Gamma Healthcare (ABGH), overseeing the integration of advanced technologies across 17 facilities spanning multiple states.
- Integrated GPS location data into the patient portal app, resulting in a 30% reduction in patient check-in times.
- Achieved a 98% accuracy rate in maintaining secure and compliant patient records, utilizing MySQL, SQL, and Postgres for database management, alongside AWS for cloud-based data storage contributing to the organization's reputation for data integrity.

Progress Report Management System — *January 2023-April 2023*

- Designed and developed a web-based Complete Progress Report Management System leveraging skills in HTML, CSS, and JavaScript to streamline the reporting process and enhance efficiency for over 100 projects across multiple departments.
- Executed stored procedures and triggers to automate routine tasks such as sending notifications and updating report statuses, saving over 100 hours of manual work per month.
- Optimized SQL queries and indexes to improve query performance, reducing report retrieval times by 91% from 10 seconds to 0.9 seconds and enhancing overall system efficiency and user satisfaction.

N-Gram Assisted YouTube Spam Comment Detection — *October 2021- January 2022*

- Detected and deleted over 1 million intrusive comments on YouTube with 95% accuracy using a Machine learning model with various algorithms and heuristics.
- Boosted the model's spam comment detection by 10%, improving user satisfaction and retention rates using Deep Learning techniques such as Word Embedding and Bi-directional Gated Recurrent units.