Venkata babu Alapati

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Data Scientist with expertise in machine learning, predictive analytics, and data engineering, leveraging advanced statistical models to optimize business decision-making. Proficient in building demand forecasting models, developing recommendation systems, and automating data processing pipelines to enhance operational efficiency and improve model accuracy. Skilled in cloud-based machine learning deployment (AWS , Snowflake, Azure), deep learning frameworks (TensorFlow, PyTorch), and optimization techniques to drive innovation in data-driven solutions. Adept at collaborating with cross-functional teams to translate complex datasets into actionable insights, enabling business growth, automation, and strategic forecasting.

TECHNICAL SKILLS

Programming Languages: Python, SQL, C++, Shell Scripting, R, Pyspark, JavaScript, HTML, CSS
Data Engineering: Apache Airflow, AWS Glue, Snowflake, Hadoop, Spark, ETL Tools
Databases: ETL, Hadoop, MySQL, Mongo DB, RDBMS, AWS S3, PostgreSQL, Oracle, SQLite, AWS EC2
Cloud Platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, Snowflake, Snow Park, Heroku
CI/CD & MLOPs: GitLab CI/CD, AWS DevOps, Azure DevOps, Jenkins, Terraform, Kubernetes

PROFESSIONAL EXPERIENCE

ITEXCEL, Data Scientist, Full time, Nashua, NH　　　　　　　　　　　　　　　　　**Sep 2024 - Present**
- Design and deploy advanced demand forecasting models utilizing Python, TensorFlow, and XGBoost, enhancing inventory accuracy and reducing holding costs by 15% through predictive analytics and real-time data insights.
- Enhanced recommendation accuracy by 25% through the implementation of TF-IDF, Word2Vec, and GloVe embeddings, improving contextual understanding and semantic representation of textual data in recommendation models.
- Achieved 90% prediction accuracy for user-item interactions by fine-tuning collaborative filtering models, leveraging hyperparameter optimization techniques to maximize relevance and personalization in recommendations.
- Optimized training efficiency by reducing processing time by 35% through refined data preprocessing workflows, utilizing SQL Window Quires, pandas, NumPy, and parallel batch processing with joblib to accelerate computation.

Coders Data, Data Scientist, Full Time, Cheyenne, Wyoma　　　　　　　　　　　　　　**Jun 2024 – Aug 2024**
- Achieved 99% accuracy in sales predictions by integrating advanced machine learning models in Python with Alteryx workflows, enabling precise revenue forecasting and data-driven decision-making.
- Developed a recommendation system that enhanced product diversity by 25%, leveraging optimized similarity measures in Alteryx and collaborative filtering techniques to improve customer engagement.
- Optimized ETL performance by reducing latency by 50% using Alteryx's In-Database tools, streamlining data processing in Snowflake and SQL Server for faster analysis.

Dash Metrix's, Data Scientist, Full Time, Dover, Delaware　　　　　　　　　　　　　　**Oct 2023 - Jun 2024**
- Enhanced financial volatility predictions by integrating Bollinger Bands and Prophet models into interactive Streamlit dashboards, providing real-time insights for investment and risk management.
- Developed high-precision clustering models with 90% purity by leveraging K-Means and PCA-based techniques, improving customer segmentation and targeted marketing strategies.
- Achieved 92% forecasting accuracy with SARIMA and LSTM, improving demand planning and trend analysis. Automated segmentation with Snowflake and SageMaker, adapting to changing data & reduce manual efforts.

Apziva, Resident AI, Part Time, Remote, Turkey　　　　　　　　　　　　　　　　　**Oct 2023 - Jun 2024**
- Achieved 95% OCR accuracy and latency by 40% by designing and optimizing batch pipelines with SageMaker Batch Transform, AWS Lambda automation, and ElastiCache, enabling faster and more scalable OCR processing.
- Achieved 88% accuracy in predicting happiness levels by training and fine-tuning Random Forest, Gradient Boosting, and SVC models on SageMaker with feature engineering and sentiment analysis for improved psychological insights.

One Magnify, Data Scientist, Full Time, Detroit, MI　　　　　　　　　　　　　　　　**May 2023 - Aug 2023**
- Increased time-series model performance by 50% by optimizing database schemas in Snowflake, enabling faster time-based aggregations and improving the efficiency of large-scale trend analysis.
- Enhanced time-series forecasting accuracy by implementing DATE_TRUNC and indexed partitions, significantly improving query performance for trend analysis and reducing processing time for predictive analytics.

Danlaw Inc, Software Engineer, Full Time, Novi, MI　　　　　　　　　　　　　　　　**Jan 2023 - May 2023**
- Developed predictive ECU calibration models with Python and Git version control scripts and configuration files, automating CANalyzer configuration and test log workflows, enhancing accuracy by 15%

ADDITONAL EXPERINCE

Senior Software Engineer | AMD India Development Center | Bangalore, India | **Software Developer** | Satyam Computers Limited Hyderabad, India **| Technical Engineer** | General Electric India Innovation Center | Hyderabad, India | **Hardware Engineer** | Indus Rad Inc. | Hyderabad, India | **R & D Engineer** | HBL Power Systems Limited | Hyderabad, India | **New Installation & Distribution Engineer** | HCL Info Systems Limited, Bangalore, India

EDUCATION AND CERTIFICATIONS

Wayne State University Mike Ilitch School of Business - **Master of Science in Data Science & Business Analytics** GPA | 3.81
MIT-CTL -Micro Maters, **Supply Chain Management** GPA | 3.6
JNTU College of Engineering - **Master of Technology in Embedded Systems** GPA | 4.0
Certifications: AWS - Practical Data Science | Oracle Certified Architect | MITx - Computational Programming with Python