# Chekitha Swayampu

Arlington, Virginia 🥒 +1 (571) 564-3644

#### **Education**

George Washington University, Washington, DC, US

Aug 2023 - May 2025

• MS in Data Science; GPA: 4.0/4.0

Vellore Institute of Technology, Amaravathi, AP, India

• B.Tech in Computer Science – Spec in Data Analysis; GPA: 3.47/4.0

Jul 2019 - May 2023

#### **Technical Skills**

**Programming and Scripting Languages**: Python, R, SQL, Java, JavaScript, HTML, CSS, Bash **Developer Tools and Environment**: Jupyter Notebook, Google Colab, R-Studio, MATLAB, BigML, Tableau, Power BI, Apache Spark, D3.is, Visual Studio, GitHub, Git, TabPy

Libraries/Frameworks: TensorFlow, Keras, PyTorch, XGBoost, scikit-learn, Statsmodels, Prophet, SciPy, Matplotlib, Seaborn, ggplot2, Plotly, Streamlit, OpenCV, YOLO, MediaPipe, Natural Language Toolkit (NLTK)

Databases and Storage: MySQL, PostgreSQL, MongoDB, Cassandra, Neo4j, AWS RDS, AWS S3, AWS Athena

Big Data and Cloud Technologies: AWS Glue, AWS Lambda, AWS Bedrock, Kubernetes, Microsoft Azure, GCP

## **Experience**

Data Analyst, Suvega Technologies - Hyderabad, TG, India

Jun 2022 - Aug 2023

- Developed an AI/ML predictive model using ETL, data cleaning, transformation, and streamlined SQL database queries, reducing truck cycle times by 35% and enhancing fleet efficiency with robust data validation checks.
- Automated large-scale data pipelines using SQL and Python, applied data engineering practices, boosting efficiency by 92%, while coordinating in an Agile environment through stand-ups and sprint planning to optimize workflows.
- Designed and optimized 10+ Tableau dashboards by integrating different SQL-based data sources, delivering real-time analytics and collaborating with teams to meet data visualization requirements and decision-making.
- Facilitated weekly client meetings, translating complex data insights into business solutions. Simplified technical concepts for non-technical stakeholders, enabling data-driven decisions and aligning analytics with operational goals.

Data Scientist Intern, ZettaMine Labs Pvt Ltd. – Hyderabad, TG, India

May 2024 – Aug 2024

- Initiated a hybrid ARIMA and XGBoost Length of patient stay forecasting model for a healthcare provider in Python with pandas and scikit-learn on admission vitals and labs, achieving 92% accuracy for bed capacity management.
- Conceptualized exploratory data analysis in RStudio on over 3 million retail and manufacturing records, utilizing ggplot2 visualizations, correlation matrices, and clustering, to find trends that led weekly executive reports.

## **Projects**

# **Temperature Forecasting using Time Series Techniques**

Jan 2025 - Apr 2025

- Engineered an ETL pipeline to import and preprocess 2.9 million US daily temperature records using datetime parsing, statistical analysis, IQR outlier elimination, lag/rolling features, seasonal indicators, label encoding.
- Architected, ARIMA, SARIMA, Random Forest, XGBoost, LSTM via RMSE, MAE, R<sup>2</sup>; identified XGBoost (RMSE 3.74 °F, MAE 2.87 °F) as most accurate, built PowerBI and Plotly dashboards visualizing predictions, error distributions.

# Impact of Weather on Energy Consumption Using AWS Cloud Services

Aug 2024 - Dec 2024

- Implemented a predictive model in AWS SageMaker to forecast energy consumption using historical weather data.
- Built a data pipeline using AWS Glue for ETL and S3 for storage, enabling efficient data ingestion and preprocessing.
- Visualized energy consumption trends and model predictions using AWS QuickSight, providing actionable insights.

## Multi-Feature Evaluation On Facial Data Using CNN

Oct 2022 – Dec 2022

- Led a three-person team to deploy an Artificial Intelligence and Machine Learning, production grade, GPU-optimized TensorFlow CNN in Python for live face attribute classification, achieving 96% gender and 93% emotion accuracy.
- Enhanced facial detection by combining OpenCV and TensorFlow with MediaPipe's 468-point 3D face model, enabling real-time inference and identification of facial characteristics and eye movements under varied lighting.

## **Certifications**

- AWS Certified Data Engineer Associate AWS
- Oracle Cloud Infrastructure 2025 Certified Data Science Professional Oracle