

Shrishail Ravi Terni

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EDUCATION

The George Washington University
Master of Science in Data Analytics

Washington, DC
August 2023 - May 2025

RELEVANT WORK EXPERIENCE

LifeBridge Health

Baltimore, Maryland
July 2025 - Present

Research Database Coordinator

Tools used: SQL, RedCap, Python, OpenAI, Pandas, Numpy, Github, Microsoft Excel

- Built a secure **RAG-based clinical NLP** system leveraging **Business Associate Agreement**-covered LLM services to retrieve and extract longitudinal patient metrics (e.g., gait, cognitive scores, vitals) from unstructured Cerner notes, with validation logic and automated **REDCap API** integration for production registry population under **HIPAA** constraints.
- Designed and optimized **REDCap instruments** to streamline clinical data entry workflows, reducing data inconsistency rates and improving real-time tracking of study metrics.
- Supporting data management and regulatory documentation for an ongoing **Hydrocephalus study**, ensuring accurate data capture, secure handling of PHI, and adherence to IRB and HIPAA guidelines.

Childrens National

Washington, DC
April 2025 - June 2025

Machine Learning Engineer Intern

Tools used: SQL, PowerBI, Python, GPT-3, OpenAI APIs, Pandas, NumPy, Git, and GitHub

- **Performed end-to-end analysis of Bulk RNA-sequencing data using R and Bioconductor packages** (DESeq2, tximport, ggplot2) to identify differentially expressed genes from hospital-based patient samples.
- **Developed a reproducible RNA-seq analysis pipeline** for quality control, normalization, statistical modeling, and visualization using R Markdown and version-controlled via GitHub, ensuring transparency and repeatability of results.
- Generated actionable biological insights, including pathway enrichment and gene-set analysis, contributing to ongoing clinical research by highlighting potential gene biomarkers relevant to the disease under study.

Somika Group

DRC, Africa
June 2024 - August 2024

Machine Learning Engineer Intern

Tools used: ODOO ERP, PowerBI, and Python

- Designed and implemented **10+** interactive dashboards in **PowerBI**, providing real-time insights into **Sales, Purchase, Inventory** and **Accounting** operations, reducing manual reporting time by **40%**.
- Developed **15+** KPIs, including **COGS** reports, Month-wise sales trends, and Category-wise purchase price breakdowns, leading to a **20%** improvement in procurement cost optimization and inventory turnover.
- Conducted **Exploratory data analysis (EDA)** and **Feature engineering**, resulting in a **30%** improvement in predictive modeling for revenue and inventory optimization.
- Developed and deployed an **Anomaly detection model** for stock movement and **scrap analysis**, reducing operational inefficiencies by **15%**.

Computronics Academy

Belgaum, India
April 2023 - June 2023

Machine Learning Engineer Intern

Tools used: SQL, Tableau, Python, GPT-3, OpenAI APIs, Pandas, NumPy, Git, and GitHub

- Conducted Text analysis on **50,000+** native language customer feedback entries, improving sentiment classification accuracy by **20%** using **Hugging Face Library**.
- Built structured reports and 10+ visual dashboards in **Tableau**, presenting sentiment trends and enhancing customer insights reporting efficiency by **35%**.
- Trained supervised learning algorithms on **100,000+** labeled text samples, improving **Sentiment polarity** classification accuracy from **75% to 88%**.
- Fine-tuned a deep learning model (**LSTM-based**) for native language processing, achieving a **12%** increase in model accuracy compared to baseline machine learning models.

RESEARCH

Elsevier, VIT/Expert Systems With Applications

May 2023 - July 2023

- Developed an automated subjective answer evaluation system leveraging Natural Language Processing (NLP) and deep learning techniques. Implemented a three-pronged approach integrating **Keyword detection**, **Semantic similarity scoring**, and **Named Entity Recognition (NER)** to assess textual responses with precision.
- Achieved a **71%+** accuracy rate and reduced error margins (**RMSE: 0.031**), significantly outperforming traditional methods (40-60% accuracy).

TECHNICAL PROJECTS

Autism Detection from Brain MRI using Deep Learning

Feb 2022 - May 2025

- Built a full-stack, cloud-hosted system leveraging a 3D CNN model trained on the ABIDE dataset to classify autism from preprocessed MRI scans, achieving 57% accuracy with optimized batch-wise training, augmentation, and deployment via Flask API on a GCP VM with GPU support.

Data Analyst, FDA Adverse Event Prediction System

Aug 2024 - Nov 2024

- Built and optimized machine learning models (Logistic Regression, Random Forest, and XGBoost) to predict adverse drug reactions, achieving an 82% accuracy with a tuned Random Forest Classifier, enabling proactive pharmaceutical safety monitoring and real-time risk assessment.

Data Analyst, Loan Approval Prediction

Aug 2024 - Nov 2024

- Developed a machine learning model using Propensity Score Matching and logistic regression to predict loan approval, improving decision accuracy and reducing default risks for financial institutions

Machine Learning Engineer, Age, Gender, and Emotion Detection from Facial Images

Feb 2024 - May 2024

- Developed a CNN model with 85% accuracy to detect age, gender, and emotion from facial images using computer vision techniques.

Data Modeler, Regression Analysis of Crime Data

Sept 2023 - Nov 2023

- Performed an in-depth regression analysis on the California Crime Dataset using Minitab, achieving an Adjusted R-square accuracy of 75%.

TECHNICAL SKILLS

- **Languages:** C/C++, Java, Python, JavaScript, HTML/CSS, R, PHP,
- **Frameworks:** NodeJS, Pandas, TensorFlow, Scikit learn, SciPy, NumPy, Matplotlib, Pyspark
- **Software:** Microsoft Excel, Minitab, Microsoft PowerBI, Tableau, SAAS
- **Databases:** MySQL, Microsoft Access, MongoDB, ArangoDB, DuckDB
- **Methodologies:** Agile (**Scrum, Kanban**), Waterfall
- **Licensure:** Azure cloud Fundamentals, Azure AI Fundamentals