Sai Pooja Buttamgari

Gmail: **buttamgaripoojareddy@gmail.com** | Phone: **704-906-7144** |**GitHub** | **Linkedin** | **Portfolio**

Professional Summary

Graduate Computer Science student with strong experience in data analysis, machine learning, and software systems. Skilled in Python, SQL, and data visualization, with hands-on experience supporting coursework, research, and analytics projects. Proven ability to assist with instruction, mentoring, experimentation, and clear technical documentation.

Education

University of North Carolina at Charlotte | MS Computer Science | GPA: 3.80/4.0 **Year: 2024-2026**

CMR Institute of Technology, India | BTech Computer Science | GPA: 3.05/4.0 **Year: 2020-2024**

Professional Experience

Data Management Intern, Astute Infocom **May 2023 - Oct 2023**

- Analyzed **500K+ records** using **Python and SQL**, improving **data accuracy by 25%** and reducing **reporting errors by 15%**.
- Automated **data validation and quality checks**, ensuring **99% data integrity** and cutting **manual review time by 30%**.
- Delivered **KPI dashboards and stakeholder reports**, enabling faster **business insights and decision-making**.

Python Intern, Edugene Technologies Pvt. Ltd. **Sep 2022 - Oct 2022**

- Performed **data analysis and validation** on **10K+ monthly transactions**, improving **operational efficiency by 40%**.
- Automated **ad-hoc analysis and reporting** workflows using **Python**, reducing turnaround time for client reports.
- Supported **data cleaning and preparation** to improve reporting accuracy and consistency.

Full Stack Development Intern, Swecha **May 2022 - Jun 2022**

- Built **analytics-driven dashboards** for **200+ daily users**, increasing **user engagement by 40%**.
- Optimized **data rendering and frontend performance**, reducing **bounce rate by 36%**.
- Enabled **stakeholder-ready visual reporting** through responsive, data-centric UI design.

Projects

Amazon Customer Reviews Analytics & Predictive Modeling | Python, Scikit-learn, NLP, TF-IDF, Pandas | **Git Url**

- Analyzed **50K+ reviews** using NLP (TF-IDF + Logistic Regression), achieving **85% sentiment accuracy** and **R² = 0.42**.
- Performed extensive **EDA and text preprocessing**, engineering **25+ NLP features** to improve model performance by **15%**.
- Converted unstructured review data into actionable **customer sentiment and product quality insights**.

AI-Powered Job Market Analytics & Decision Intelligence Dashboard | Streamlit, Plotly, SQL, Python | **Git Url**

- Analyzed **10K+ job postings** across **15+ industries** to identify salary trends, skill gaps, and remote-work patterns.
- Built an interactive **Streamlit + Plotly dashboard** with **12+ visuals**, reducing insight time by **35%**.
- Delivered real-time, stakeholder-ready analytics supporting career planning and hiring decisions for **50+ users**.

Fake Currency Detection using Machine Learning | Python, OpenCV, Scikit-learn, KNN | **Git Url**

- Analyzed **1,000+ currency images** using OpenCV feature extraction and **KNN**, achieving **90% detection accuracy** at **30 images/sec**.
- Optimized model performance with **GridSearchCV**, reducing false positives by **18%** and improving precision to **92%**.
- Enabled near-real-time fraud detection through efficient preprocessing and model tuning.

Technical Skills

Programming: Python, SQL, C++, JavaScript, HTML, CSS

Data Analysis & Querying: SQL, Python (Pandas, NumPy), Exploratory Data Analysis (EDA), Statistical Analysis, Data Cleaning, Feature Engineering

Visualization & BI: Power BI, Tableau, Plotly, Streamlit, Dashboard Design, KPI Reporting

Databases: MySQL, MongoDB, Data Modeling, Query Optimization

Cloud & Big Data: AWS (S3, Lambda, EC2), Apache Spark, ETL Pipelines

Machine Learning: Scikit-learn, TensorFlow, Keras, NLP, Predictive Modeling, Hyperparameter Tuning

Tools & Platforms: Git, GitHub, VS Code, Jupyter Notebook, Linux, pytest, Agile/Scrum

Leadership

Class Representative, CMR Institute Of Technology **Year: 2020-2024**

- Led academic operations for **60+ students**, coordinating with **15+ faculty members**, organizing **20+ technical workshops** (Python, data science, web development), and implementing peer mentoring programs that improved **class engagement by 30%** and overall **academic performance by 15%.**

Certifications

Google – Data Analytics Certificate | **Cisco Networking Academy –** Introduction to Cybersecurity | **Coursera –** Project Management