# **ANEESH KRISHNA**

+1(716) 303-1623 | aneeshkr@buffalo.edu | Linkedin | Github | Portfolio 75 Montrose Buffalo NY 14214

#### **EDUCATION**

#### University at Buffalo, The State University of New York

Master of Science in Data Science

Buffalo, NY Dec 2024

Key Courses: Statistical Learning and Data Mining, Machine Learning, Deep Learning, Database Management

# Visvesvaraya Technological University

Mangalore, INDIA

Bachelor of Engineering in Computer Science

July 2020

Key Courses: Algorithm Analysis, Big Data Analytics, Cloud Computing, Data Structures and Applications

#### SKILLS AND CERTIFICATIONS

- **Programming Languages**: Python, JavaScript, C#, SOL, R, MATLAB, Scala.
- Data Analysis & Visualization: pandas, numpy, matplotlib, seaborn, Plotly, Tableau, Power BI, Microsoft Excel.
- Machine Learning & AI: TensorFlow, PyTorch, scikit-learn, Keras, Deep Learning, NLP, Transformers, CNN, LLM, Time Series Analysis.
- Big Data & Cloud Technologies: AWS, GCP, Azure, Hadoop, Spark, Dask, ETL
- **Certifications and Specializations:** Google Data Analytics Specialization, Data Science and Business Analytics, Deep Learning Specialization.

### **EXPERIENCE**

# Graduate Research Assistant, University at Buffalo, NY:

July 2024 - Present

- Achieved 98.55% classification accuracy and an F1 score of 0.984 by engineering a dataset of 18,000+ records and optimizing ML classifiers.
- Enhanced ML model performance through advanced feature engineering techniques, achieving up to 98.55% accuracy and an F1 score of 0.984.
- Designed and optimized an NLP-based IDS with BERT, achieving a near-perfect F1 score of 1.0 and an AUC of 1.0 for sequence classification.

#### Senior System Engineer, Infosys Ltd, Mysore, India:

Oct 2020 - Apr 2023

- Modernized 15+ outdated web components using SPFX, reducing loading time by 30% and enhancing user experience through improved performance and streamlined functionality.
- Monitored migration of over 10 million files and metadata from 67 sites using the Microsoft ShareGate tool to the latest site, meeting stakeholder expectations.
- Developed PowerBI reports and dashboards, providing critical insights and aiding strategic planning.

# **PROJECTS**

# Optimizing Healthcare Outcomes through Data-Driven Insights & Machine Learning click here

- Accomplished 90% size reduction by data-cleaning, encoding (to JSON), and performing feature selection on a large dataset, leveraging libraries such as polars.
- Extracted healthcare insights, spotlighting gender and age-specific trends in diseases, post-operative complications, and hospital length of stay via Plotly, Matplotlib and Seaborn libraries.
- Built predictive models for patient length of stay, attaining an 82% accuracy (R-squared metrics) through Gradient Boosted Trees after Bayesian hyperparameter optimization.

#### Loan Risk Prediction Model for Small Businesses click here

- Performed preprocessing on initial Excel data, employing NoSQL to normalize the data and establish a relational database.
- Conducted EDA by querying data with SQLite, producing informative visualizations on business sector distributions and default rates using seaborn and plotly libraries.
- Implemented an ML model for classifying businesses' loan repayment likelihood, achieving a 93% accuracy rate with Random Forest algorithm.

### Sports Data Analytics of Cricket World Cup click here

- Cleaned and preprocessed over 1 million records from ESPNcricinfo of all T20 matches (2015-2023) using Python and Pandas, enhancing data quality for analysis.
- Extracted and analyzed stadium statistics and team performance data for the 2024 T20 World Cup using SQL, Pandas, Tableau, Matplotlib, and Seaborn, providing strategic insights and detailed team profiles.
- Compiled and stored all data insights into CSV files and generated an interactive Tableau dashboard, ensuring efficient data handling and effective communication of key insights.

### Cricket Statistics LLM Chatbot click here

- Developed an AI chatbot using LLM, converting natural language queries into Pandas codes for cricket data analysis.
- Built data processing pipelines with Pandas, handling up to 1 million rows and generating insights on player performance and match statistics.
- Integrated Google Gemini Pro LLM, achieving 95% accuracy in transforming user prompts into executable code for data manipulation.
- Created an interactive Streamlit UI, improving query response time by 50% and enhancing user experience with intuitive input and visualization.