

ANEESH KRISHNA

Buffalo, NY | aneeshkr@buffalo.edu | [Linkedin](#) | [Github](#) | [Portfolio](#)

EXPERIENCE

Graduate Research Assistant

University at Buffalo

Aug 2024 – Present

Buffalo, NY

- Enhanced threat detection through the integration of BERT and GloVe models, achieving 99.98% accuracy and a 1.0 F1 score in context-aware interpretation of network traffic patterns and log anomalies.
- Improved attack vector classification accuracy by 20% using packet analysis across all 7 OSI layers, extracting advanced features from log sequences for real-time threat detection.
- Achieved 98.55% accuracy in anomaly detection using a Naive Bayes model with TF-IDF Vectorizer, optimizing feature extraction and classification for system log analysis and network security.

Data Migration Analyst

Infosys Ltd

Oct 2020 – Apr 2023

Remote, India

- Designed and automated Power BI dashboards and reports to track data migration progress across 90+ sites, using DAX for calculations and providing real-time analytics to stakeholders for data-driven decisions.
- Coordinated User Acceptance Testing (UAT) of reports to ensure a seamless transition into production, enhancing reporting accuracy by 40% through advanced data visualization techniques and stakeholder feedback integration.
- Streamlined SharePoint site redesign processes by utilizing PowerShell and SQL based scripts, significantly reducing manual intervention by 50% and increasing deployment efficiency for large-scale data migration projects.
- Led a team of 5 engineers in automating complex data workflows and modernizing legacy SharePoint sites, improving data processing efficiency by 60% through the integration of SPFX, Azure Devops and optimized data pipelines.

PROJECTS

Cricket Statistics LLM Chatbot | Published Website (~100 hrs) - [Site](#) / [GitHub](#)

Python, GenAI, Streamlit, Firestore

- Engineered an interactive Streamlit-based chatbot utilizing Google's Gemini-Pro LLM model to generate and execute pandas code for cricket statistics analysis, enhancing user engagement with complex data.
- Improved AI model accuracy by 25% as measured by user feedback scores by implementing a comprehensive feedback system using Google Firestore and creating a custom fine-tuning pipeline for the GenAI model.
- Expanded the database by 30% through ESPNcricinfo web scraping using tools like BeautifulSoup and snowflake, enriching player information for comprehensive cricket analysis.
- Reduced application deployment time by 50% as measured by time-to-market metrics by leveraging Google Cloud Platform services to seamlessly integrate AI, database, and web technologies in a cloud-based environment.

Optimizing Healthcare Facilities | Team Project (~60 hrs) - [GitHub](#)

Python, Optuna, Seaborn, scikit-learn

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

Sports Analytics of Cricket World Cup | Personal Project (~40 hrs) - [Article](#)

Python, Pandas, Seaborn, Tableau

- Cleaned and preprocessed over 1 million records from ESPNcricinfo of all T20 matches (2015-2023) using Python and Pandas, implementing ETL pipelines to enhance data quality for further analysis.
- Extracted and analyzed stadium statistics and team performance data for the 2024 T20 World Cup using Tableau, Matplotlib, and Seaborn, providing strategic insights and detailed team profiles.

British Airways Review Dashboard | Personal Project (~10 hrs) - [Dashboard](#)

KPI, ETL, Tableau

- Developed an interactive Tableau dashboard analyzing 300+ reviews of British Airways' services, focusing on cabin staff performance, aircraft efficiency, and traveler feedback, implementing ETL processes to extract insights into key KPIs related to customer satisfaction.

Adidas USA Sales Dashboard | Personal Project (~10 hrs) - [Dashboard](#)

KPI, ETL, Tableau

- Designed a dynamic Tableau dashboard to track Adidas USA sales performance, focusing on month-over-month growth, retailer contributions, and regional sales, driving actionable insights for strategic decision-making.
- Enhanced business forecasting by visualizing sales trends across products and regions, leveraging custom calculations, interactive maps, and real-time data updates for more precise insights.

Loan Risk Prediction Model | Personal Project (~80 hrs) - [GitHub](#)

Python, Seaborn, PostgreSQL

- Performed data preprocessing on initial Excel datasets, employing NoSQL to normalize the data and establish a relational database using PostgreSQL, ensuring data integrity and optimal ETL workflows.
- Conducted Exploratory Data Analysis (EDA) by querying data with SQLite, producing informative visualizations on business sector distributions and default rates using Seaborn, Plotly, and Matplotlib, enhancing data-driven insights.
- Implemented various machine learning models for classifying businesses' loan repayment likelihood, achieving a 93% accuracy rate using the Random Forest algorithm and optimizing feature selection with scikit-learn.

SKILLS AND CERTIFICATIONS

- **Languages:** Python, SQL, R, MATLAB.
- **Software:** AWS, GCP, Langchain, TensorFlow, Pytorch, scikit-learn, Keras, Hugging Face Transformers, Tableau, Power BI, Excel, Google Data Studio, Excel
- **Frameworks:** XGBoost, LightGBM, Optuna, Pandas, Numpy, Dask, Plotly, SQL, Seaborn
- **Certifications:** Google Data Analytics Specialization, Data Science and Business Analytics, Deep Learning Specialization.

EDUCATION

University at Buffalo, The State University of New York

Master of Science, Majors: Data Science

Relevant Coursework: Statistical Learning and Data Mining, Machine Learning, Deep Learning

Expected Dec 2024

Buffalo, NY

Visvesvaraya Technological University

Bachelor of Engineering in Computer Science

Relevant Coursework: Data Structures, Algorithms, Software Engineering, Database Management

Aug 2016 – Aug 2020

India