Sampat Bandlamudi

sam.bandlamudi@gmail.com | (916)-799-6198 | LinkedIn: sampat-bandlamudi| GitHub: sampatb1 | My Website

EDUCATION

The University of Texas at Dallas   **Richardson, Texas**
B.S. in Data Science   *Expected Graduation, May 2026*
  - o **Related Coursework:** Machine Learning, Database Systems, Applied Linear Models, Statistical Learning, Data Structures and Algorithms, Data Analysis in R, Software Development with Java and C++, Theoretical and Advanced Calculus, Linear Algebra, Discrete Math

SKILLS

Programming: Python, R, C++, Java, JavaScript, HTML/CSS, SQL, PHP
Libraries and Tools: Scikit-learn, TensorFlow, Keras, PyTorch, Pandas, NumPy, ggplot2, Seaborn
Techniques: Linear and Logistic Regression, K-Means and Hierarchical Clustering, Decision Trees, Random Forests, SVMs, PCA
Certifications: Programming Using Python, Relational Database and SQL, Data Science and AI, Project Planning

EXPERIENCE

Patient-Link: Clinic Management System   **Richardson, Texas**
Team Lead   *Jun 2025 - Aug 2025*
  - Led a team of five in the end-to-end design and implementation of a full-stack web application intended to replace an inefficient, spreadsheet-based workflow for a medical clinic.
  - Architected a relational database in MySQL, creating an ER model and logical schema. Normalized all relations to 3NF to ensure data integrity and eliminate anomalies as well as enforcing referential integrity with foreign key constraints.
  - Developed a multi-user web portal using PHP and HTML/CSS, allowing role-based CRUD operations.

Hotel Room Ratings Regression Analysis   **Richardson, Texas**
Team Member   *Feb 2025 – May 2025*
  - Devised data preprocessing for 3,000+ hotel bookings, cleaning data through parsing error correction, imputation, and feature engineering to yield 2,705 analysis-ready observations
  - Directed comprehensive EDA in R in order to identify hotel rating and log(RoomPrice) as key predictors of guests
  - Engineered and implemented an OLS regression model using AIC-based stepwise selection, explaining 74.6% of variance in room ratings
  - Performed model validation, including VIFs below 1.2, residual analysis, and also Cook's distance evaluation for influential points

Netflix Content Release Analysis   **Dallas, Texas**
Team Member   *Sep 2024 - Dec 2024*
  - Created a predictive engine using classification (Random Forest, Logistic Regression) and time-series forecasting models to identify optimal release windows for new Netflix content
  - Implemented advanced feature engineering using historical viewership data and utilized K-Means clustering to segment content genres, achieving 90% accuracy in identifying viewership patterns as well as in predicting genre-specific peak demand

Intelligent Weather Forecasting Bot   **Richardson, Texas**
Personal Team Project   *Sep 2024 – Nov 2024*
  - Integrated public weather APIs with an AI module using historical data, improving forecast accuracy by 15%
  - Developed an IRC bot that processed over 10,000 API calls, reducing user query response time by 30% through machine learning optimizations

ACTIVITIES AND LEADERSHIP

Alliance Ground International   **Irving, Texas**
Passenger Service Agent   *Jun 2024 - Mar 2025*
  - Contracted to Sun Country Airlines, facilitating key passenger operations including baggage check-ins, ticket sales, and flight boarding at the gate

BizInstitution   **Coppell, Texas**
President & Co-Founder   *Jul 2022 - May 2023*
  - Co-founded and scaled a student-led initiative from concept to an organization of 10+ active members
  - Created the entire non-profit website where anyone could access to watch educational content across many courses