PRANAY BHAKTHULA

Arlington, VA 22203 | bhakthulapranay@gmail.com | (202) 469-2775 | Linkedin | Portfolio | Github

SUMMARY

- Experienced Data Analyst with proven track record of leveraging advanced technical skills in Python, SQL to implement robust data cleaning and pre-processing frameworks that improved data quality of 30%
- Proficient in generating data reports and dashboards using Tableau, and possess strong interpersonal skills and critical thinking to present actionable insights and perform quick ad-hoc analysis to stakeholders
- Additional expertise in Machine Learning and Data Engineering fields, enabling comprehensive understanding from the ETL process to model building. This proficiency facilitates to design highly efficient solutions and contribute to potential career growth

PROFESSIONAL EXPERIENCE

Amazon Web Services (AWS) - Solutions Architect Intern – Data Science; Seattle, WA May 2022 – Aug 2022

- Developed and implemented real time video analysis of basketball shot to provide shot and posture analysis of the shooter with accuracy of 76% by object detection and image classification using CNN, Yolov7 models
- Designed and tested over 30 ML models using AWS S3, AWS EC2 to find the best model, resulted in increasing the accuracy by 14% and decreasing the runtime by 25%
- Created AWS QuickSight dashboards to closely monitor KPIs, including performance metrics, runtime and computational resources, resulting in a 20% increase in overall model efficiency
- Learned AWS sales procedures and tools available to assist customers by shadowing meetings between Solutions Architects and 4 different AWS customers

George Washington School of Public Health – Graduate Research Assistant; Washington, DC Nov 2021 – Dec 2022

- Implemented SQL queries to extract and update research expenditures of departments, exported the results as Excel sheets from SSMS, which reduced analyzing time by 40%
- Collaborated with the cross-functional team to implement secure and reliable data management and reporting systems using SQL Server and Tableau, resulting in a 70% reduction in report generation time
- Produced insightful monthly expenditure reports and dashboards using Excel and Tableau, contributing to a 20% improvement in resource allocation and budget forecasting accuracy

Centre for Rural Studies and Development - Data Analyst; Hyderabad, India Jun 2019 - Jul 2021

- Developed and executed 100+ complex SQL queries to analyze Federal and State budgets data in departments such as Agriculture, Education, Health to create data-driven reports instrumental in advocating for and facilitating policy change
- Designed Tableau dashboards to monitor KPIs and track expenditure, resulting in increased data-driven decision making, improved budget allocation and annual savings of 800K rupees, subsequently enhanced stakeholder retention
- Utilized Tableau in presentations to stakeholders in monthly meetings to review data findings, address concerns, and provide recommendations for optimizing processes and strategies
- Conducted ad-hoc analyses by comparing current and prior fiscal year government budgets and expenditures, including benchmarking with previous administrations to provide key insights for informed strategic decision-making processes
- Collaborated to publish monthly reports using Excel and analytical writing, resulted in doubled publications, heightened awareness of the organization's research and policy change strategies, and a 45% increase in donor funds
- Automated data collection from various sources using Python to implement web scraping, PDF parsing for generating monthly and annual reports, resulting in reduction of over 100 hours in manual data collection time

PROJECTS

Covid-19 Analysis | SQL & Tableau May 2023

- Analyzed a 313k records of covid 19 dataset using SQL queries to assess the global impact of the pandemic, examining mortality rates, infection rates, vaccination coverage, hospitalization trends and economic indicators across multiple countries
- Published two interactive Tableau dashboards to effectively communicate key insights from the analysis

Loan Prediction | Python Dec 2022

- Predicted loan status with an accuracy of 82% using Random Forest classifier, Naïve Bayes, KNN, Logistic Regression, XGBoost classifier models, with XGBoost classifier having highest accuracy
- Implemented pre-processing methods such as handling missing values, data deduplication, class balancing methods such as SMOTE, EDA, outlier removal to improve efficiency by 20%

Kobe Bryant Shot Selection | Python Jun 2021

- Predicted shots on Bryant's career with 67% accuracy by building MLP classifier and Random Forest classifier
- Determined strengths and weakness from opponent's perspective in strategizing against Bryant in the 2 out of 5 final appearances by conducting effective EDA analysis

EDUCATION

The George Washington University | Master of Science in Data Science (CGPA: 3.95/4) **|** Washington, DC Jan 2023

Concentrations: Data Mining, Data Warehousing, Data visualization, Deep Learning, Natural Language Processing (NLP)

- Graduate Teaching Assistant for Cloud Computing Course, Awarded Global Leaders Fellowship-2021, Winner of Datathon-2021

Sathyabama Institute of Science and Technology | Bachelor of Engineering in Electronics and Communication | India May 2019

SKILLS

- **Programming languages:** Python, SQL, R, SAS, HTML, CSS
- **Database Management:** MySQL, Oracle, MS SQL Server, NoSQL (MongoDB), Big Data (Hive, Hadoop, Spark)
- **Data Visualization tools:** Excel, Tableau, Microsoft Power BI, Google Analytics (GA4), Qlik, Cognos
- **Cloud Services:** Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP)
- **Big Data tools:** Snowflake, Alteryx, Databricks