# MUNI SANDEEP KUMAR RAVILLA

Tempe, AZ | (602) 723-8240 | mskravilla@gmail.com | linkedin.com/in/muniravilla | github.com/muniravilla | muniravilla.vercel.app Data Analyst with 3+ Years of Experience in Predictive Analytics and Machine Learning.

#### **EXPERIENCE**

**Arizona State University** 

Tempe, AZ

Data Analyst

- January 2023 May 2024
- Established a PostgreSQL database and SQL queries to analyze 500,000+ student records, enhance accuracy and identify key predictors.
- Developed and deployed Python scripts for automated data processing and analysis, enhancing data operations efficiency and scalability.
- Implemented data pipelines using SQL and Alteryx, resulting in 15% reduction in processing time and 10% improvement in data accuracy.
- Presented detailed insights in Tableau, leading to an increase in intervention initiatives aimed at supporting student success.
- Optimized data workflows with Workday Adaptive Planning to enhance student retention analysis by 40% and support academic success. Skills: SQL, Python (Pandas, NumPy), PyAutoGUI, Scikit-Learn, Scrapy, Tableau, KPI, Alteryx, Workday Adaptive, ETL.

#### **Tata Consultancy Services**

Bangalore, India

System Analyst

January 2021 – July 2022

- Implemented predictive modeling using Apache Spark and Hadoop, 3% reduction in fraudulent activities through real-time data analysis.
- Spearheaded trend analysis using Power BI and SQL, leading to increase in loan approvals and reduced credit risk through data insights.
- Employed Tableau and QlikView for ROI analysis, leading to a \$125,000 quarterly efficiency gain and a 10% reduction in overhead costs.
- Led integration of new banking technologies and historical data into reporting systems, ensuring data integrity and compliance.
- Delivered user management and application support for financial software ensuring regulatory compliance and minimizing downtime.
- Streamlined ETL pipelines and integrated SAS for advanced analytics, reducing integration time by 30% and improving data accuracy. Skills: Power BI, Tableau, QlikView, Jira, Bitbucket, ServiceNow, Control-M, Git, Gap Analysis, PeopleSoft ERP, Retrofitting.

KaaShiv InfoTech Chennai, India

Big Data Analytics – Summer Intern

April 2019 – July 2019

- Enhanced hotel efficiency by analyzing check-in/out processes with a Power BI Dashboard, achieving a 30% reduction in wait times.
- Analyzed hotel occupancy with Python and SQL, optimizing dynamic pricing and driving a 25% revenue increase during peak seasons.
- Developed ML models to reduce equipment downtime by 20% and save \$5000 quarterly through improved maintenance scheduling.
- Implemented an NLP-based guest feedback analysis system, generating actionable insights and improving guest satisfaction by 15%. Skills: Power BI, Python (Pandas, Numpy), SQL, Machine Learning (Scikit-Learn), Natural Language Processing (NLTK, spaCy)

#### **PROJECTS**

## Oil and Chemical Spill Incident Analysis and Clustering | Link

August 2023 – December 2023

- Clustered spill incidents based on severity and impact, achieving a 30% improvement in understanding their diverse effects.
- Improved dataset quality by 25% through geospatial and textual preprocessing, extracting actionable insights from spill descriptions. Skills: Apache Airflow, GPT-3, SMOTE, XGBoost, t-SNE, KMeans Clustering, Python, SQL, Tableau, OpenAI API.

# Interactive Disease Analysis Dashboard | Link

January 2023 – May 2023

- Developed a Tableau dashboard, enhancing insights by 30% for analyzing socio-economic factors and disease prevalence.
- Implemented filters for diseases, age, and state selection, enhance user exploration of health data by 30% and facilitating trend identify. Skills: Tableau, Python, SQL, Data Analysis, Dashboard Development, Socio-Economic Data Analysis, Public Health Analysis.

## Predictive Analysis of Blog Feedback | Link

January 2023 – May 2023

- Utilized SVD for dimensionality reduction and feature selection to predict the number of comments on blog posts.
- Compared the performance of regression models using SVD-generated features and preprocessed features on the Feedback dataset. Skills: Databricks, PySpark, Linear Regression, Decision Tree, Feature Engineering, Model Evaluation, Predictive Modeling.

#### **EDUCATION**

**Arizona State University** 

Tempe, AZ

Master of Science, Information Technology – GPA: 4.0/4.0

May 2024 Courses: Analyzing Big Data, Data Visualization & Reporting to IT, Advanced Big Data Analytics/AI, Advanced DB Management.

**Anna University** Bachelor of Engineering, Computer Science and Engineering Chennai, India

Courses: Database Management System, Information Retrieval, Programming Data Structures and Algorithms, Social Network Analysis.

September 2020

Published Paper on "Sentiment Analysis Using Logistic Regression Algorithm" in European Journal of Molecular & Clinical Medicine.

## TECHNICAL SKILLS

Languages: Python, C++, R, HTML, CSS, Advanced SQL (MS SQL Server, PostgreSQL, Apache Cassandra, Amazon RDS, NoSQL). Tools: Looker, MS Excel, Google Data Studio, Power Query, BigQuery, AWS (Glue, RedShift, SageMaker), Azure Data Factory. Project Management: Agile, Scrum, Teamwork, Leadership, Public Speaking, Adaptability, Analytical Thinking, Attention to Detail.