# Jael Kruthi Battana

#### SKILLS

**Data Manipulation Tools** : Advance Excel- Power Query, DAX; Google Analytics

**Data Visualization Tools** : Power BI; Tableau; Google Data Studio

**Programming Languages** : Python; SQL; R; SAS, JavaScript; HTML, CSS; Java

**Database Applications** : MS SQL; MySQL; PostgreSQL

Cloud/ ETL : Salesforce; Google Cloud Platform; Talend

Statistical Libraries : Padas, Numpy, Seaborn, Matplotlib, SciKit-Learn, NLTK, Scrapy, BeautifulSoup, PySpark

Version Control/ Collaboration : Visual Studio Code; Jupyter Notebook; Google Colab; Anaconda; Git; Jira; CI/CD; Microsoft Office Suite

AI Automation Tools : ChatGPT, Claude 3 Opus, ML tools

#### WORK EXPERIENCE

#### • Data Science Instructor | University of Advancing Technology | Arizona, USA

Jan 2024 - present

- Experience in teaching data science courses, Python, Databases and JavaScript Programming to over 100 students; designed curricula emphasizing data analysis, statistical-behavioral data science, customer behavior, customer segmentation techniques, enabling 75% of students to develop proficiency in leveraging data-driven decision-making.
- Proficient in working with AI tools like ChatGPT, programming languages such as Python and R, to analyze large datasets, observe trends, extract insights, and communicate complex data findings to diverse audiences including stakeholders, clients and customers.
- Utilized predictive modeling to analyze customer engagement, purchasing trends, and documented marketing strategies.
- Experience in teaching how to effectively use Power Query, DAX, and create interactive dashboards in Power BI and Tableau to visualize data for better decision-making.

#### Research Assistant | University of Maryland | Baltimore County, USA

**July 2023 - Dec 2023** 

- Utilized Advanced Excel, Python, and SQL to gather and analyze pivotal Public Health datasets (Scopus and Pubmed), achieving a 40% increase in research efficiency.
- Directed data integrity and cleansing, forming statistical tables and charts, setting a robust 20% foundational advancement for subsequent analysis.
- Exploited Google Colab and ChatGPT alongside Python's computational libraries for efficient, reproducible research within Public Health realms.
- Undertook predictive modeling and classification using machine learning techniques, decoding intricate patterns and Key Performance Indicators in expansive health datasets.
- Designed impactful data visualizations using Tableau and Power BI for comprehensive analysis, essential for compelling grant proposals.

#### • Software Developer | StackNexus | India

Sept 2020 - Jan 2021

- Spearheaded full-stack Salesforce CRM development, crafting UI screens for California's Automated Ledger System using HTML, CSS, JavaScript; achieved four sprints with 100% deployment success.
- Collaborated with a cross-functional team to enhance interfaces reducing deployment times by 50%.
- Applied CI/CD methodologies, emphasizing rigorous unit testing and code migrations, enhancing test coverage by 10%.
- Designed and executed Salesforce Administrator custom automations with workflows and process builders to meet specific requirements.
- Championed full-stack development, balancing frontend customization and backend logic for a seamless user experience.
- Engaged with stakeholders for feedback, refining in line with Salesforce Development best practices and trends.

# **PROJECTS**

## • Data Analysis using Excel, Sales data

- Integrated vast sales data using advanced Excel (specifically Pivot Tables and VLOOKUP), achieving 35% time efficiency in data cleansing.
- Utilized Power Query for data transformation and cleansing, handling challenges from extensive data...
- Crafted interactive dashboards emphasizing trend identification and enhanced data storytelling techniques on PowerBI and spreadsheets.

## • Data Analysis using Python, Accidents data

- Analyzed over 100,000 vehicle crash incidents in Maryland (2015-2021), identifying key accident patterns and factors like age, weather, and road conditions using statistical and trend analysis techniques.
- Generated actionable insights for local authorities, insurers, and policymakers, recommending data-driven interventions and safety measures based on identified accident-prone areas, peak times, and demographic factors, resulting in optimized resource allocation and risk management strategies.
- Developed and visualized statistical models, achieving a 90% accuracy rate in identifying high-risk factors and accident frequency patterns, informing targeted road safety policies and improving decision-making processes for road safety interventions.

# • Time Series Analysis of Medical Appointments, Appointments data

- Executed Time Series Analysis on medical appointments using Python and MySQL, improving patient engagement and resource allocation by 30%.
- Addressed challenges with complex MySQL queries and stored procedures to understand time series patterns, emphasizing Data Cleaning, and Exploratory Data Analysis.
- Leveraged precise Database management for enhanced healthcare insights through effective data visualization using Tableau.

## • Customer Lifetime Value Analysis, Customers data

- Predicted customer's lifetime value and classified customers based on their lifetime value using probabilistic models on a transactional e-commerce dataset of over 100,000 customers.
- Documented insights for a marketing team for campaign and cost per acquisition optimization, yielding 25% reduction in customer acquisition costs
- Implemented advanced customer segmentation techniques to identify high-value customer cohorts, facilitating targeted marketing efforts and personalized customer experiences, resulting in increasing the customer retention rates.
- Achieved an 85% accuracy rate in predicting customer lifetime value, providing reliable data for informed decision-making and resource allocation.

## **EDUCATION**

#### University of Maryland, Baltimore County, Maryland Master of Professional Studies in Data Science

May 2023

 Coursework: Data Analysis using Python, Data Analysis and Machine Learning, Platforms for Big Data Analysis, Data Management, Structured System Analysis and Design, Project Management

# Jawaharlal Nehru Technological University, Hyderabad Bachelor of Technology in Computer Science

**Sept 2020** 

 Coursework: Database Management System, Python Programming, Data Mining, Introduction to Analytics, Data Analytics, Software Engineering, Business Economics and Financial Analysis, Web Technologies