# Siddharth Modi

(240) 481-3644 ● smodi12@umd.edu ● LinkedIn

## EDUCATION

**University of Maryland, Robert H. Smith School of Business** — **College Park, MD, USA**
**Master of Science**, Information Systems GPA 3.52/4.0 — Dec 2024
**Medicaps University** — **Indore, India**
**B. Tech**, Computer Science in Data Science, GPA 3.51/4.0 — May 2023

## TECHNICAL SKILLS

- **Data Analytics and Business Intelligence Tools:** Python, R, Excel, MySQL, AWS Redshift, Hive, Snowflake
- **Data Visualization:** Tableau, PowerBI, Matplotlib, Seaborn, SSRS, Looker, ggplot, SPSS
- **Statistical Skills:** ANOVA, Hypothesis Testing, Regression Analysis, Statistical Formulas
- **Other Skills:** MS PowerPoint, SharePoint, MS Word, Azure
- **Machine Learning:** Scikit-learn, TensorFlow, Keras, PyTorch, Pandas, NumPy, Neural Models
- **Certifications:** Tableau Desktop Specialist

## WORK EXPERIENCE

**Strategic Solutions International** — **Washington DC, US**
**Data Analyst Intern** — Jun 2024 – Aug 2024

- Improved financial analysis by optimizing data pipelines and using relational database, data warehousing and DBT, boosting forecast accuracy by 20% and reducing retrieval time by 30% through SQL-based data manipulation and cleaning.
- Conducted detailed market research and A/B testing for financial models, discovering opportunities that boosted product growth by 15%, aligning with data statistical analysis and data modeling principles.
- Developed interactive Power BI dashboards using Power Query and DAX, incorporating real-time data visualization for financial KPIs, which improved stakeholder decision-making efficiency by 25%.

**Jaideep Ispat & Alloys Pvt Limited** — **Indore, India**
**Data Scientist** — Apr 2023 – Jun 2023

- Extracted, cleansed, and integrated data from multiple sources to form large datasets, applying Random Forest to optimize production scheduling, thereby augmenting operational efficiency by 20%.
- Developed and deployed AI-driven predictive models through regression analysis, anomaly detection, and financial modeling, using these techniques for production cost forecasts and resource allocation, which included ad hoc analyses to address unique production challenges and reduce defect rates by 25%.
- Refined data integration through utilization of Random Forest and K-means clustering, enhancing statistical data governance via collaborative efforts and Python-based solutions.

**Sonic Biochem** — **Indore, India**
**Data Analyst Intern** — Aug 2021 – Aug 2022

- Collaborated with cross-functional teams to analyze CRM user engagement data using Python automation, leading the project management of data analysis tasks and identifying trends that boosted customer retention by 15%, while effectively sharing insights with non-technical stakeholders.
- Utilized SQL and Python to create dashboards tracking SaaS subscription metrics such as churn rate, active users, and MRR (Monthly Recurring Revenue), managing the project timeline to ensure timely delivery.
- Developed predictive models using random forests and time-series analysis to forecast customer purchasing behaviour and engagement trends, applying project tracking methods to support data-driven pricing strategies and enhance customer satisfaction by 20%.

## PROJECT EXPERIENCE

**Healthcare Data Integration and Analysis**

- Conducted healthcare resource analysis using SQL, Excel (pivot tables, VLOOKUP, VBA), and independently wrote macros to automate data entry processes, leading to process improvements that optimized resource allocation for over 10,000 patients, improving efficiency by 20% and reducing operational costs by 15%.
- Applied Agile methodology, leading sprints and retrospectives to iteratively enhance data integration and analysis with Hive and SAS, enabling improvements that reduced delays by 30%.
- Developed machine learning models using Python, SQL, and SAS to predict healthcare resource demand and patient outcomes, leveraging algorithms like random forests, reducing wait times by 20%.

**Homicide Prediction: Data Analysis**

- Analyzed homicide reports using Chi-square tests, regression analysis, and Alteryx to uncover correlations between crime rates and socioeconomic factors, improving law enforcement strategies and crime prevention by 15%, while maintaining data governance and consistency through Snowflake.
- Collected and mined data from 10,000+ homicide reports using Python, R, SQL, SPSS revealing actionable trends, leading to a 15% improvement in law enforcement strategies with 99% data integrity ensured.
- Developed interactive Tableau dashboards (e.g., time-series) to visualize crime patterns, boosting crime prevention by 20%, while ArcGIS was applied to map geographical trends for better resource allocation.