Siri Poojitha Devarakonda

Health Informatics and Data Analyst

USA | +1 (980) 349-5583 | siripoojithad@gmail.com | LinkedIn

SUMMARY

Health Informatics and **Data Analyst** with **3+ years** of experience in managing and **analyzing healthcare** data to drive informed decision-making. Proficient in **Python**, **R**, **SQL**, **Tableau**, **Power BI**, and **SAS** for data visualization. Expertise in **statistical analysis**, **ETL and** data wrangling processes. Experienced with cloud technologies (**AWS**, **Azure**) and databases (**MySQL**, **SQL Server**). Demonstrates strong communication, **analytical**, and ability to work on teams, focusing on delivering actionable insights within healthcare settings.

SKILLS

Programming Languages:	Python, R, SQL
Data Science and Machine Learning:	Scikit-learn, Pandas, NumPy, Matplotlib
Big Data and Data Processing:	Hadoop, Spark, Hive
Tools:	Tableau, Power BI, SAS, Looker Google Studio, Alteryx
IDEs:	Visual Studio Code, PyCharm, Jupyter Notebook
Packages:	NumPy, Pandas, Matplotlib, SciPy, ggplot2, Apache SPARK, Scikit- learn
Database:	MySQL, SQL Server, PostgreSQL, MongoDB
Cloud Technology:	AWS (S3, EC2, IAM, RDS, Lambda), Azure, SSIS, SSAS, SSRS, Informatica
ETL:	Data Profiling, Data Integration, Data Modeling
Specializations:	Data Wrangling, Data Visualization, Statistical Analysis, Data cleaning and transformation
Software and Tools:	Git, GitHub, Microsoft Excel (Advanced), MS PowerPoint, MS Word, SharePoint
Methodologies:	SDLC, Agile, Waterfall
Other Skills:	Critical Thinking, Communication, Presentation, Problem-Solving.

WORK EXPERIENCE

Public Health Data Analyst **May 2024 – Present**

Doublene, USA

- Built predictive models using SAS and Python, achieving 85% accuracy in forecasting disease outbreaks, reducing case counts by 15%, and optimizing resource allocation by 25%.
- Analyzed 1M+ public health records using advanced statistical techniques (regression, time series forecasting) to identify risk factors and trends, reducing outbreak response times by 20%.
- Utilized AWS (S3, EC2, RDS, IAM) to create secure, scalable cloud-based data storage and processing, increasing data security.
- Streamlined data pipelines with Python (Pandas, NumPy) and SQL, automating data preprocessing, integrating data from 5+ sources, and improving reliability by 30%.
- Designed interactive Power BI dashboards to visualize disease trends and KPIs, increasing decision-making efficiency by 30% for public health officials.
- Ensured HIPAA-compliant data management with Amazon S3, boosting data retrieval efficiency by 50%, and collaborated with 50+ professionals to implement data-driven strategies, enhancing protocol adherence by 20%

Data Analyst **Jan 2021 – Mar 2023**

Techecy, India

- Developed predictive models to evaluate loan default probabilities based on borrower characteristics and loan details, improving risk management, decision-making, and forecasting accuracy by 25%.
- Streamlined ETL processes using SQL Server Integration Services (SSIS) and integrated financial data from 5+ sources into a consolidated repository, ensuring data quality, consistency, and integrity, reducing errors by 15%.
- Conducted data cleaning, transformation, and exploratory data analysis (EDA), uncovering key borrower behavior trends, leading to a 10% reduction in operational costs and enhanced modeling readiness by 20%.
- Automated reporting workflows using SQL, Tableau, and Python, reducing reporting time by 40%, and applied clustering and data mining techniques to refine risk assessment strategies and increase customer engagement by 15%.
- Collaborated in an Agile environment, leveraging statistical methods, KPI tracking, and A/B testing to deliver actionable insights, enabling efficient resource allocation and improving risk management strategies

PROJECTS

Cancer Prediction and Prognosis

- Developed a machine learning model using **Python** and **R** for predictive analysis, improving diagnostic accuracy by 20% through data-driven, statistically grounded methodology. Leveraged artificial neural networks and convolutional neural networks to comprehensively evaluate medical records, achieving a 10-20% increase in cancer susceptibility and outcomes prediction.
- Designed a secure, user-friendly interface for healthcare providers, ensuring easy access while maintaining patient anonymity.

Medicare Telehealth Trends Analysis

- Conducted advanced analysis on telehealth adoption trends among Medicare populations, focusing on demographic (age, race, sex) and geographic (urban vs. rural) disparities and underserved regions
- Designed and implemented machine learning models to forecast telehealth usage trends, integrating clustering algorithms and developed dynamic geospatial visualizations and interactive dashboards using **Tableau** and **Power BI.**

Building Virtual Assistant and Email Automation

- Developed a **Python**-based virtual assistant with 90% accuracy in speech recognition, leveraging **gTTS**, **SpeechRecognition**, and Play sound libraries to streamline interactions and automate task execution
- Automated email handling, web searches, and location mapping using Google APIs, reducing manual tasks by 20% and enhancing operational efficiency.
- Improved assistant usability by integrating real-time error handling and natural language processing, achieving a 25% increase in user engagement.

Emergency Management Dashboard - Link

- Created Designed an interactive Tableau dashboard to process and visualize 100K+ records, enabling real-time decision-making in emergency management through automated insights
- Leveraged advanced visualizations, data blending, and interactive filters to enhance user engagement and streamline healthcare management workflows.

CERTIFICATIONS

- Data or Specimens only Research-CITI Training- **Link** **Oct 2024**
- Social & Behavioral Research(IRB)- CITI Training- **Link** **Sep 2024**

EDUCATION

Master of Science in Health Informatics and Analytics **Aug 2023 – Dec 2024**
University of North Carolina, NC, USA GPA - 4.0 / 4.0