# RAJ VARSHITH REDDY MALGIREDDY
## DATA ANALYST

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## PROFESSIONAL SUMMARY

I'm a curious and driven Data Science and IoT specialist with a passion for turning data into meaningful stories and solutions. I love digging into complex datasets, automating processes to make life easier, and collaborating with teams to create impact. With experience in everything from building real-time sensor systems to designing intuitive dashboards, I thrive on learning new technologies and finding creative ways to solve problems. Always eager to grow and contribute, I'm excited to take on new challenges and continue making a difference through data and technology.

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## EDUCATION
**University of Missouri-Kansas City**
**Master of Science, Computer Science**      **Jan 2022 – Dec 2024**
**Scholarship:** Umsystem Grant

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## CERTIFICATION
**Microsoft Certified: Power BI Data Analyst Associate**
**Earned on: August 29, 2025**
**Credential ID: 2EB6F3D0E7029C1**

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## SKILLS:

- **Programming & Tools:** Python, SQL, Azure Data Lake, Hadoop, Alteryx, Power BI, SAS, Excel (VLOOKUPs, Pivot Tables), ER Diagrams, ETL Processes, Jira, Google Analytics
- **Data Analysis & Visualization:** Power Query, DAX, Data Cleaning, Statistical Analysis, Data Transformation, Data Blending
- **Database Management:** Azure SQL Database, Database Tuning, Indexing, Query Optimization, Logical and Physical Database Design
- **Automation & Optimization:** Automated Data Workflows, Performance Tuning, Data Quality Assurance, Data Validation, Back-End Testing

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## PROFESSIONAL EXPERIENCE:
**Client: Fortis Healthcare, Gurgaon, India**      **June 2020 - August 2021**
**Role: Data Analyst**
**Responsibilities:**
- Coordinated with the front-end design team to provide them with the necessary stored procedures and packages and the necessary insight into the data.

- Analyzed large datasets using **Azure Data Lake Analytics,** enabling complex data processing and transformation tasks to support business intelligence and reporting needs.
- Managed and optimized **Azure SQL** Databases, performing database tuning, indexing, and query optimization to improve data retrieval performance and support analytics workflows.
- Involved in extensive DATA validation by writing several complex **SQL** queries and involved in back-end testing and worked with data quality issues.
- Designed **ER diagrams,** logical model (relationship, cardinality, attributes, and candidate keys), and physical database (capacity planning, object creation, and aggregation strategies) as per business requirements.
- Designed and implemented data **extraction, transformation, and loading (ETL)** processes to extract data from mainframe databases, transform it into compatible formats, and load it into the target environment.
- Automated data cleaning, transformation, and visualization tasks using **Python**, improving efficiency and accuracy in data preparation and reporting.
- Optimized **Hadoop** cluster performance through fine-tuning configurations and job execution settings, reducing processing time.
- Designed and executed complex **SQL** queries to extract, manipulate, and analyze large datasets, supporting data-driven decision-making and reporting.
- Integrated and transformed data from various sources using **Power Query** and **DAX** in **Power BI**, creating cohesive reports that addressed key business metrics.
- Performed data manipulation and statistical analysis using **SAS** procedures, enhancing the accuracy of business insights and forecasts.
- Developed dynamic dashboards and reports using **Excel** features such as **Power Query** and **Power Pivot** to provide actionable insights and track key performance indicators.
- Designed and developed data workflows in **Alteryx** to streamline data blending, cleansing, and transformation processes, enhancing data preparation efficiency.
- Developed custom reports and dashboards in **Google Analytics**, delivering key performance metrics and trends to stakeholders.
- Created and maintained detailed project documentation in **Jira**, including user stories, acceptance criteria, and task assignments.
- Created pivot tables and ran **VLOOKUPs** in **Excel** for data validation, while manipulating, cleansing, and processing data using **Excel**, Access, and **SQL**.

**Environment:** Azure, VLOOKUPs, SQL, ER diagrams, ETL, Python, Hadoop, DAX, Power BI, Alteryx, Google Analytics, Jira, Excel.

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**Academic Experience:**

- **Teaching Assistant, University of Missouri-Kansas City**               **Jan 2023 - Dec 2023**
  Assisted in computer science courses, providing guidance on programming and data analysis concepts.

- **General Volunteer, American Red Cross (Kansas City, MO)**               **Jan 2023 - May 2025**
  Supported community events and initiatives, fostering a spirit of collaboration and service.

- **Student Mentor, Computer Science Leadership Council, UMKC**          **Aug 2023 - Dec 2023**
  Mentored students, sharing knowledge on academic and technical skills development.

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**PROJECT EXPERIENCE**

- **Medical Insurance Cost Analysis and Prediction**: Analyzed factors influencing medical insurance costs using Python and multiple regression techniques. Key findings include significant cost impacts from age, BMI, smoking status, and region. *Technologies*: Pandas, Scikit-Learn, Statsmodels, Data Visualization.

- **Cloud Data Upload Using Wi-Fi**: Developed a system with ESP32 to send temperature and humidity data to a Flask server over Wi-Fi. Implemented data formatting in JSON and real-time monitoring on the server side.

- **Data Upload Using Bluetooth**: Engineered a BLE-based system with ESP32 for broadcasting sensor data and simulating battery levels. Ensured data integrity and demonstrated BLE communication with mobile apps.

- **ESP32 BLE Project**: Designed a BLE communication system for real-time temperature, humidity, and battery level updates. Leveraged nRF Connect for data monitoring and debugging.

- **Emotion Detection Using MobileNetV2**: Built an emotion recognition model using transfer learning on MobileNetV2. Employed data augmentation, early stopping, and learning rate scheduling for optimal performance. Achieved high accuracy with detailed model evaluation metrics.

- **Advertising Sales Prediction Using Linear Regression**: Predicted sales outcomes using advertising budgets and linear regression models. Enhanced model accuracy through feature engineering and regression analysis.

- **Database Independent Report Generator**: Developed a universal SQL client in Java to execute queries across multiple databases. Implemented GUI features for ease of use, such as commit/rollback options and CSV import/export.

- **Data Analysis & SQL Project**: Conducted advanced SQL queries to derive customer insights and improve spending behavior. Visualized data using Tableau and Python for impactful storytelling.

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**PASSION PROJECTS & INTERESTS**

- **Travel Enthusiast**: Exploring new cultures and experiences.

- **Continuous Learning**: Committed to personal and professional growth.

- **Hatha Yoga Practitioner**: Engaged in mindfulness and well-being activities.