

Abhijith Kasula

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Work Experience

Data Engineer, Devoir Software Solutions, Columbus, Ohio **June 2023 - Present**

- Collaborated with teams to create robust [architecture](#) to extract real-time data from medical devices
- Connected to medical devices across the US using **MQTT** protocols using **AWS IoT Core** for data transfer
- Performed serverless **ETL** operations with **AWS Lambda** and **AWS Glue** for further data analytics
- Channeled the data obtained from **ETL** operation to **AWS S3** and archived the unnecessary data
- Captured the important metrics using **AWS Kinesis Firehose** while ingesting high volumes of data
- Ensured **HIPAA** compliance and regulations were being followed to ensure a safe data transfer process
- Communicated with Data Scientist teams to enhance data quality for running models on **AWS SageMaker**
- Reduced downtime by 17.6% with the help of the predictive maintenance system with **ML** models
- Utilized **AWS QuickSight** to gain actionable insights into equipment health and performance metrics
- Attended internal audits regularly then optimized and reduced the failure of ETL jobs by 6.6%
- Worked with teams to incorporate quality data security measures using **AWS KMS**, **AWS IAM**, and **VPC**
- Utilized AWS Secrets Manager to rotate sensitive credentials for reducing security vulnerabilities
- Configured **AWS CloudWatch** to notify the data engineering team to resolve the failed ETL jobs

Data Analyst, Thinklusive. Inc, Monmouth Junction, New Jersey **September 2022 – May 2023**

- Performed the required test needed to be done in the [DMAIC](#) process of Six Sigma practices
- Performed advanced data-cleaning techniques to enhance the quality of datasets for further analysis
- Maintained live **Tableau** dashboards that provided real-time insights to the quality and production teams
- Performed necessary Statistical Analysis on Google Colab to understand trends, correlations, and patterns
- Assisted Data Scientists to refine the **ML** models for better timely detection of manufacturing anomalies
- Authored detailed documentation for the entire **Six Sigma** process to meet the industry standards
- Worked with cross-functional teams to improve the manufacturing process based on data insights

Data Analytics Intern, Gas Turbine Research Establishment of India (GTRE), **January 2021 - July 2021**
GTRE is the R&D laboratory of the Defense Research and Development Organization (**DRDO**).

- Specialized in performing ETL techniques on large datasets related to gas turbines using **Python** and **SQL**
- We conducted extensive data visualization through **PowerBI**, providing detailed overview of performance
- Utilized **R** for predictive modeling, forecasting potential maintenance intervals and turbine lifespan
- Collaborated closely with engineers, translating data insights into actionable engineering improvements
- Implemented best practices for secure and scalable data storage solutions, ensuring quick data retrieval
- Boosted the operational efficiency of gas turbines by **8.7%** through data-backed recommendations, extending the average turbine lifespan by two months

Data Analytics Intern, Tech-Ed Equipment Private Limited, Bangalore, India **March 2020 – December 2020**

- Collaborated with teams to integrate the kit with existing systems for compatibility through **AWS** services
- Harnessed the power of **PowerBI** and **Python** libraries to create visuals for better decision-making
- Managed database queries and data manipulation using **SQL**, enhancing kit efficiency and speed
- Created seamless user experience by integrating user-friendly UI using **HTML**, **CSS**, and **JavaScript**
- Enabled stakeholders to gain a 360-degree view of their data, leading to a **25%** increase in data-driven decision-making across the organization

Education

Master of Engineering from the **University of Cincinnati**, Cincinnati, Ohio.

Bachelor of Technology from **Presidency University**, Bangalore, India.

Skills and Certifications

Skills: Python, Tableau, PowerBI, Excel, R, SQL, IoT core, Kinesis Firehose, S3, Redshift, Glue, Lambda, QuickSight, CloudWatch, HTML, CSS, JavaScript, Python, Numpy, Pandas, Seaborn, SolidWorks 2018, CATIA V5R20, Autodesk Fusion 360, AutoCAD 2018, ANSYS Workbench, ANSYS Fluent, Adobe Photoshop, Adobe Illustrator, Adobe After Effects, Blender, English, Kannada, Hindi, and Telugu.

Certifications:

[Autodesk CAD/CAM for Manufacturing Specialization](#) | [R Programming](#) | [SQL for Data Science](#)
[Excel Skills for Business Specialization](#) | [Data Science Math Skills](#)