

# RUTHWIK REDDY RATNA

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## EDUCATION

<b>Arizona State University (ASU)</b> , Tempe, Arizona	August 2021 - Present
Masters in Computer Science	GPA : 4.10/4
<b>National Institute of Technology (NIT Raipur)</b> , Raipur, India	July 2014 - May 2018
B.Tech.Electronics & Telecommunication Engineering	GPA : 3.44/4
<b>Coursework:</b> Statistical Machine Learning, Data Mining, Data Processing at Scale, Pattern Recognition, Data Structures, Artificial Intelligence, Digital Image Processing, Neural Networks, Probability and Stochastic Process etc.	

## TECHNICAL SKILLS

**Programming Languages:** Python, C/C++, Java, SQL, Scala, Shell  
**Web Technologies:** HTML5, CSS, Bootstrap, JavaScript, SASS, jQuery, React.js, React Native, Node.JS, Express.JS, REST and SOAP web services, Typescript  
**Tools, Database and OS:** Microsoft Power BI, Oracle BI, Cognos BI, Query Surge, SQL Server Management Studio, PostgreSQL, Netezza, MS Office Suite, Windows, MacOS, Linux/Unix, Jira, Azure Boards.  
**Familiar Interdisciplinary Areas:** Retail sales Informatics and Health Informatics.

## PROFESSIONAL EXPERIENCE

**WIPRO LIMITED, Chennai, India: Project Engineer (Big Data Analyst).** July 2018 – July 2021

- Had 3 years of experience in developing BI applications utilizing **SQL server, Power BI, Query Surge and Oracle BI**.
- Responsible for Extracting, Transforming and Loading (ETL) data into the Data warehouse from Heterogeneous databases such as **Oracle, DB2, SQL Server and MS Access**.
- Developed complex and customized Stored Procedures and Queries for implementing business logic and process in backend, for data extraction, reports and other client interfaces.
- Designed expressions to calculate, group, filter, parameterize, and format report contents.
- Designed and developed Power BI graphical and visualization solutions with business requirement documents and plans for creating interactive dashboards. Implemented several **DAX** functions for various fact calculations for efficient data visualization in Power BI.
- Analyzed the data collected from retail outlets is streamlined in a proper way as per the business requirement and many operations on data are made as it fits in business requirement.
- Established the connections between Power BI and databases which are one of the sources of data to Power BI and retain data based on business requirements.
- Generated **Power BI** reports and validated them for functionality and accuracy of the report for drawing meaningful insights.
- Experience with **Agile** based project management and worked with rapid technical design and implementation of the project.
- Awarded **Best Employee** award for outstanding performance while enhancing the model without impacting the existing functionality. Worked as a **Team Lead** for the team of size 8.

## ACADEMIC PROJECTS

**Large-scale Geospatial Data Analysis using SparkSQL (Skills: Hadoop, Spark, Scala, Eclipse, AWS EC2, MapReduce)**

- Performed Geospatial Data Analysis using **SparkSQL** on New York Taxi data to recognize the areas with high pick-up probability.
- Created 3 Master-Slave Elastic Cloud Compute (EC2) instances of Amazon web services with **Apache Spark** and **Hadoop** frameworks.
- Implemented Hot Zone and Hot Cell analysis on this dataset by communicating through password-less SSH protocols and identified 50 hot zones.

**Time Series Data Analysis to Detect Meal Intake from Glucose Data (Skills: Python – Pandas, NumPy, Scikit-learn, Machine learning models)**

- Performed statistical analysis on Insulin and Glucose Time series data to determine the meal intake times of a diabetic patient.
- Extracted significant features from the data and classified meal and no meal data based on these features using Support Vector Machine.
- Clustered these data into bins of glucose range 20 using **K-means** and **DBSCAN** and performed cluster validation using SSE, entropy, and purity.