

Ram Prasad

Mail: prasad@tgcworld.com

Phone: 9703285248

PROFESSIONAL EXPERIENCE

- 9 years of experience in the field of information technology primarily around Python (Pandas, NumPy, Asyncio, Flask).
- Proficient at developing, optimizing, extract, manipulate, analyze & interpret data from various data sources, developing analytic solutions and deriving key observations using Python.
- Experienced in data querying languages (SQL and MySQL), scripting languages (Python), No SQL (MongoDB) and machine learning libraries.
- Extensive experience in data analysis and/or reporting along with strong knowledge of database and related technologies.
- Developed and optimized ETL workflows in both legacy and distributed environments.
- Worked on datasets related to batteries, telecommunication, energy and analyzed large datasets using pandas and pyspark.
- Expertise in reporting tools Tableau and Grafana.
- Experience in Elasticsearch, Kibana, Logstash and Kafka.
- Expertise in statistical methods, statistical analysis, data visualization, data mining, feature engineering and model selection techniques.
- Scheduling the reports Daily, Weekly and Monthly basis as per the Client Requirements.
- Served as a primary point of contact for workbook and custom Tableau reporting solutions related issues.
- Experienced in directly interacting with clients in taking requirements and delivering projects.
- Maintained adequate communication with project team, explaining the progress on the development effort.

SKILLS

Languages	: Python
Python Packages	: Pandas, NumPy, Asyncio, Scipy, PySpark, SQLAlchemy, pymysql
Web Frameworks	: Flask, Fast API, Django
Databases	: SQL, MySQL, PostgreSQL, MongoDB, DynamoDB
Clouds	: Azure, AWS EC2, AWS S3, AWS athena, AWS glue, GCP, BigQuery
ETL Tools	: Lava storm
Visualization Tools	: Tableau, Power BI, Grafana
Computer Vision	: OpenCV
Tools	: Airflow, Databricks, Kafka, Git, Bit bucket, Jira, gitlab, Sonar Qube

Projects

Python Developer- Tomgandhi Consulting Limited, UK; (JAN 2022 – OCT 2022)

Project Description:

Offshore Wind form is a cloud-based platform, associated with the installation of wind turbines and the connection of power grids. It will provide a comprehensive set of capabilities for the analysis and design of wind turbine sub-stations, mechanical loading, thermal resistances, and optimization techniques.

Roles and Responsibilities:

- Working with product management and technology teams to understand business needs and find possible solution.
- Developing the new features, handling enhancements and fixing bugs.
- Working with AWS cloud platform and its features **AWS EC2/S3/RDS /SES/DynamoDB** based on Python.
- Implementing AWS services like **EC2**, Elastic Load balancing (ELB), **S3**, Cloud Front, SNS, RDS, IAM
- Built application and database servers using **AWS EC2** and create AMIs as well as used RDS for **MySQL**.
- Created **AWS S3** buckets, performed folder management in each bucket, managed cloud trail logs and objects within each bucket.
- Creating **RDS** instances to serve data through servers for responding to requests.
- Used **IAM** for creating roles, users, groups and also implemented MFA to provide additional security to AWS account and its resources.
- Working with stakeholders including the Executive, Product, Data and Design teams to assist with data-related technical issues and support their data infrastructure needs.
- Responsible for analysis, development and integration of **APIs**.
- Maintained and updated a **GraphQL** layer to allow retrieval and updates of user interactions with **MySQL** database
- Implementing **GraphQL** types and resolvers to provide the necessary data for frontend development while maintaining minimal calls to the database.
- Managing the schema, tablespaces and writing mathematical functions using pandas and **SqlAlchemy**.
- Implementing multi-processing, fire and forget for the services.
- Maintained and updated unit and integration tests for both the **GraphQL** and lib level to validate behavior
- Managed **GIT** repositories for branching, merging and tagging.
- Maintain and support **API** gateway infrastructure and associated tools.
- Used JIRA tool to track all the defects and changes related to build.

Python Developer- Prieto Battery, UK; (MAR 2021 – JAN 2022)

Project Description:

Smart Battery Management System (SBMS) is a monitoring system for Industrial that runs algorithms to calculate the SoC (State of Charge), SoH (state of Health) and predicts the RUL (Remaining Useful Life) of batteries.

Roles and Responsibilities:

- Worked in designing and deploying **AWS** solutions using **EC2, S3**.
- Design roles and groups using AWS identity and access management (IAM)
- Implemented serverless architecture using API gateway, **lambda**.
- Responsible for setting up databases in AWS using **RDS**, storage using **S3 buckets**.
- Created the flask rest APIs on **Mongo DB** for requests for web application.
- Created the flask rest APIs on **Mongo DB** for requests for mobile application.
- Worked on physics-based algorithms to find **SoC** (State of Charge) for batteries.
- Worked on calculating the battery available energy, available capacity.
- Preparing the large-scale synthetic data from small scale of data and used to push to the database.
- Creating the users to access the respective tables in **Postgres**.
- Pushing the synthetic data of calculated predictions to **ELK** through python script.

- Pushing the synthetic data of calculated predictions to target tables through python script.
- Creating the indexes and data pushing to the **Kibana** through python.
- Maintaining and creating the **Grafana** visualizations for battery management data (database).
- Creating live dashboards using **Grafana**, for to monitor the algorithm predictions.
- Generated the synthetic data using random function of NumPy.
- Managed large datasets using **Pandas** data frames and **Postgres**.

Python Developer– Worley, Denmark; (JUN 2018 – FEB 2021)

Project Description:

Predix.io is a platform which holds all machineries data of current, historic and running statuses. It gives the current process, status of machines, details of manufacturing units and workflow.

Roles and Responsibilities:

- Writing effective, scalable code.
- Worked on **pyspark** to distribute data processing on large datasets.
- Responsible for setting up databases in AWS using **RDS**, storage using **S3 buckets**.
- Integration of **RESTful API**.
- Assembling large, complex sets of data that meet non-functional and functional business requirements.
- Built application and database servers using **AWS EC2** and create AMIs as well as used RDS for **MySQL**.
- Writing ETL scripts and code to make sure the **ETL** process performs optimally
- Handling data modeling, data warehouse architecture, **data pipeline**
- Managed **GIT** repositories for branching, merging and tagging.
- Developing back-end components to improve responsiveness and performance.
- Managing data storage and solutions for application robustness.
- Creating logics for data processing and computations.
- Combining raw information from different sources.

Data Analyst – Telus, Canada; (JUL 2017 – JUN 2018)

Project Description:

Intelligent Workload Distribution (IWD) is a telecom back-end service application, which reports view of back-office activities and that provides a wide range routing all types of tasks such as no of orders, complaints etc.

Roles and Responsibilities:

- Creating and developing the reports using pandas (python).
- Applying business logics and transform the data into required format.
- Auto generation of reports as day, month, and year wise using **Lava storm**.
- Optimizing different **lava storm** graphs and **tableau** reports.
- Developed Tableau workbooks from multiple data sources using **Data Blending**.
- Developing python **ETL** scripts.
- Reporting the issues and resolve the issues that rise during the test process.
- Writing **SQL** codes in **lava storm** nodes to pull data from different servers.
- Automate & optimize the data extraction and report generation process.
- Loading the processed data into tables to generate the reports

Analyst (Intern) – Skanska, Sweden; (APR 2013 – MAR 2017)

Project Description:

The objective of the project is to develop a sales data mart and develop reports focusing on different areas of organization. First Phase is to develop an ETL application for the data mart and the second phase is to develop the reports for analysis. The reports are mainly useful for the Top-level management for reviewing performances of plants and to take strategic decisions

Roles and Responsibilities:

- Writing reusable, testable, and efficient code using python.
- Auto generation of reports as day, month, and year wise using python.
- Creating Tableau visualizations.
- Publishing Workbooks and Data Sources to Tableau Development.
- Establishing connections to Data Sources.
- Adding or Creating Dimensions, Measures and Calculations.
- Performing Data Modeling in Tableau Desktop.

Project Description:

Resource Placement System using python from long time and want to migrate the old legacy scripts to new/moderate python, as some packages are downgraded and enhancing scripts for application will help to streamline the process

Roles and Responsibilities:

- Enhancing the legacy python scripts to new version.
- Collaborating with the team and gathering the requirement.
- Collate/collect data using the scripting language
- Work with product management and technology teams to understand business needs and find possible solution.
- Issues with tracking the data changes.
- Errors in workflow management.
- Worked closely with developers and business teams in resolution of technical resolutions.
- Implemented the automation scripts using python.
- Debugging and maintenance of automation scripts.

QUALIFICATIONS

Bachelor of Technology in Electronics & Communication Engineering
Jawaharlal Nehru Technological University, Hyderabad, India