

PROFILE


Experienced **Quant Data Engineer** with expertise in **gathering, processing, and analysing data** to back test and optimize trading strategies using tools like **Back trader, Apache Spark, Python, and SQL**. Skilled in **developing and automating algorithmic trading strategies**, deploying and scheduling them for live execution, and generating performance reports to drive data-driven decision-making in **Quant Finance**. Passionate about transitioning fully into **Algorithmic Trading** and contributing to innovative financial solutions

CONTACT

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PORTFOLIO

<https://shashireddy40.github.io/mypage/>

CERTIFICATIONS

ISTQB-CTFL

Big Data Engineering with
Hadoop and Spark from E&ICT, IIT
Roorkee

PERSONAL PROFILE

Full Name:

PATOORI SHASHIDHAR REDDY

Date of Birth:

10th May 1990

Languages Known:

English, Telugu and Hindi

SHASHIDHAR REDDY (SHA-SHI)

Algo Trader | Quant Data Engineer | Python | Data driven trader
Johannesburg, South Africa | EMEA-Ready

EDUCATION



Indian institute of quantitative finance(IIQF)
Post Graduate Program in Algorithmic Trading (PGPAT)
(2023-2024) | Online



Jawaharlal Nehru Technological University, Hyderabad, India
Bachelor of Technology in Aeronautical Engineering.(2007-2011)

WORK EXPERIENCE



OLDMUTUAL SA
Data Engineer | Johannesburg, South Africa | Hybrid
March 2023–Oct 2024(1.6 years)



JUMO.WORLD
Senior Data Engineer | Cape town, South Africa | Remote
Oct 2020–Feb 2023 (2+ years)



SVSS TRADING (PTY)LTD
Quant Data Engineer | Algo Trader| Johannesburg, South Africa
March 2019–May 2020. (1.3 years)



Sonata Software
Big Data Engineer | Hyderabad, India
January 2015–January 2019 (4 Years)



IrusInfotech Pvt Ltd, India
QA Analyst | Hyderabad, India
June 2011–January 2015 (3+ years)

SKILLS

Languages:

- Python
- SQL

Big data Technologies:

- Apache Spark
- NiFi
- Apache Airflow
- Delta Lake, MySQL
- Pandas, NumPy
- Polars
- Flask
- Fast API

Utilities/Tools:

- Docker
- Postman
- VS code, Postgres
- Web scraping

Cloud Platforms:

- AWS S3,
- Redshift,
- EMR,
- EC2,
- SNS, SQS
- Lambda
- Athena, Crawlers

Trading:

- Derivatives, Options, Futures,
- Indian Markets
- Back testing using **BackTrader**
- Machine learning Techniques
- Automating Reporting Tools (Email Reports to clients)
- For data visualization **Matplotlib** and **Plotly**
- Expertise in Data driven Trader

Passion Projects:

- **Scalping Web App Development:** Designed and developed a scalping application enabling one-click buy/sell functionality using keyboard shortcuts for seamless and efficient trading.
- **Stock Trading Dashboard:** Built a dynamic dashboard to identify and display **bullish stock signals**, providing real-time insights and aiding informed trading decisions.
- **Automated News Analysis for Trading:** Conceptualized a system to collect news through **web scraping** and **Twitter API**, integrating with **Generative AI** to analyze market sentiment and make **automatic trading decisions**. This innovation aims to enhance trading app performance by leveraging real-time news and social media trends.

- **PROFESSIONAL EXPERIENCE**

PROJECT #1:

Title: Two-Pot retirement system
Location: Old Mutual SA, Johannesburg, South Africa
Duration: March 2023 to October 2024
Tools Used: Spark, Python, SQL, Postgres, AWS, Polars, Pandas
Team Size: 6
Role: Data Engineer

Description:

The two-pot retirement system from Old Mutual in South Africa allows members to access a portion of their retirement savings for emergencies while keeping the rest invested until retirement.

Responsibilities:

- Design, create, build & maintain data pipelines
- Gathering data from various sources and Sending to the Two Pot system data warehouse.
- Transforming data with spark and writing the data with various data formats
- Creating Dashboards with Dynatrace and creating notifications for the failures
- Automating the CI/CD Pipeline for the entire data pipeline

PROJECT #2:

Title: Data Systems (EDW)
Partners: Tigo, Airtel and MTN
Location: Cape town, South Africa
Duration: October 2020 – February 2023
Tools Used: AWS, Spark, Python, SQL, Airflow
Team Size: 5
Role: Senior Data Engineer

Description:

JUMO is the market leading banking as a service platform, enabling real-time access to funds at the lowest possible operating cost.

Integrating into JUMO's platform enables our partners to offer loans, savings and a wide range of financial choices to a new group of customers.

The first ecosystem partnerships were established with Tigo, Airtel and MTN to bring short-term loan products to people and small businesses in Kenya, Zambia and Uganda.

Responsibilities:

- used various operators ETL pipelines that extract data from multiple sources, Transforming and stored in Delta Lake in optimized way
- Focus on simplified data models that represent business processes, operational excellence, systems & services resilience and efficiency, availability, maintainability, security.
- Building and handling successful designs, pipelines and development using Spark and AWS for large data processing systems
- build and manage workflows programmatically with Airflow
- Working in agile software-development methodology and utilizing technologies such as Jira, Git, Jenkins, Spinnaker
- Improvement of engineering processes (i.e., design reviews, build, operations, testing, release/deploy, monitoring etc.).

PROJECT #3:

Title:	Trade Data Pipeline & Predictive Modelling for Algorithmic Trading
Client:	Individual Clients (NSE/BSE Indian Markets).
Location:	Sandton, Johannesburg.
Duration:	March 2019 to May 2020
Tools Used:	Python, SQL, Postgres, AWS S3
Team Size:	6
Role:	Quant Data Engineer Quant Specialist

Description:

Developed an automated data pipeline for gathering and processing trade and stock option data to support algorithmic trading strategies. Implemented robust back testing frameworks to validate strategies using historical data, ensuring optimal performance and risk management. Collaborated with machine learning engineers by providing accurate datasets to train predictive models for price action, enabling data-driven decision-making in real-time trading environments

Responsibilities:

- Designed and developed robust data pipelines to gather, clean, and process large volumes of trade data from various financial markets and exchanges.
- Implemented and optimized back testing frameworks for testing and validating algorithmic trading strategies using historical market data.
- Collected and processed stock option data, analysing trends and patterns to support trading strategy development and optimization.
- Collaborated with machine learning engineers to provide accurate and timely datasets, enabling predictive models for price action forecasting.
- Automated data gathering for real-time market data streams and option chains, integrating with internal analytics platforms to improve decision-making.
- Conducted exploratory data analysis (EDA) and statistical modelling to identify profitable opportunities and enhance trading algorithms.
- Utilized tools like Python, SQL, Pandas, and cloud platforms (AWS) for scalable data storage and analysis, ensuring efficient and low-latency data access for trading operations.

PROJECT #4:

Title	: TUI Travel Group
Brands	: Thomson Airways, Amadeus System, British Airways.
Client	: TUI UK, British Airways.
Location	: Hyderabad, India.
Duration	: March 2015 to December 2018
Tools Used	: Hadoop, Hive, Spark, Sqoop, Cloudera, Tableau
Team Size	: 10
Role	: Big Data Engineer.

Description:

TUI Group is a multinational travel and tourism company. It is the largest leisure, travel and tourism company in the world, and owns travel agencies, hotels, airlines, cruise ships and retail stores. TUI Travel Group have several UK-based tour operators Thomson Holidays and First Choice, by using this brands Passengers able to Book Flight tickets, Hotels and Holiday Packages with Cheapest Prices to Major European Countries

Responsibilities:

- Designing and implementing semi-structured data analytic platform leveraging Hadoop.
- Extensively used Hive/HQL or Hive queries to query or search for a particular string in Hive tables in HDFS.
- Worked on analysing Hadoop stack and different big data analytic tools including Pig, Hive, and Sqoop.
- Implemented Spark using Scala and Spark SQL for faster processing of data.
- Exported the analysed data to the relational databases using Tableau for visualization and to generate reports for the BI team.

PROJECT #5:

Title	: eCRS (electronic Credit Rating System)
Client	: National Australia Bank, Australia.
Location	: Hyderabad, India.
Duration	: January 2013 to January 2015.
Team Size	: 5
Role	: Junior Data Analyst

Description:

eCRS is an online Credit Rating System that helps the bankers/employees of NAB to take a decision about issuing loans to their respective customers (organizations). There are several external factors involved in this project in order to drive the banker to take a proper decision against issuing the loans to their customers. It's a web application with different roles aligned with different privileges to access the system. The data from this system would be pushed down to another project called GDW. So, the data extraction is a crucial process in this project.

Responsibilities:

- Developed SQL queries with various data sources like JSON, Parquet.
- Exploring and analysing data, performing Grouping, Aggregation and working with joins.
- Querying data using SQL operations.
- Responsible for test scripts generation, testing and validation.
- Have a good understanding of Software Development Life Cycle (SDLC), involved in various phases like Requirement gathering, Analysis/Design, Development and Testing. Also, knowledge in Test Driven Development (TDD) process.

PROJECT #6:

Title	: Grocer-kart
Duration	: June 2011 to November 2012
Tools Used	: Quality Centre, QTEST, SQL Server 2008.
Team Size	: 5
Role	: QA Analyst

Description:

Grocer kart is an online shopping portal they do save on the infrastructure costs that we would otherwise have to incur if we had a physical store. Since at Grocer kart, the customer always comes first, we have decided to pass on our savings to you in terms of discounts on products. Customer will realize that most products are priced lesser than the MRP.

Responsibilities:

- Have a good understanding of Software Development Life Cycle (SDLC), involved in various phases like Requirement gathering, Analysis/Design, Development and Testing.
- Responsible for test scripts generation, testing and validation.
- Analysing Functional Requirements, Gathering and managing the Test Data
- Effective test case writing and execution resulting in improved coverage
- Providing input/status updates regarding test progress/results
- Assist in the assessment and planning of test efforts required for new functions/features under development
- Designing Test cases using HP Quality Canter and Executing Manually.