# VASANTH B

Mobile: 8248577533  | LinkedIn: https://www.linkedin.com/in/vasanthbalasubramaniyan/ |
Email: vasanthbalsubramaniyan08@gmail.com | Portfolio: https://vasanth-portfolio-xtjc.onrender.com/

## PROFESSIONAL SUMMARY

Data Engineer with approximately 1.9 years of experience, specializing in building scalable data pipelines and modern data platforms. Skilled in Python, PySpark, SQL, data warehousing, AWS (including S3, Glue,) and Power BI, and database management using TablePlus. Proven track record of optimizing ETL workflows, enhancing data quality, and delivering actionable business intelligence solutions. Experienced in agile collaboration using Jira with a strong commitment to continuous learning and leveraging the latest data engineering technologies to drive organizational success. Also experienced in front-end web development (HTML, CSS, Tailwind CSS, JavaScript, React.js).

## TECHNICAL SKILLS

**Programming Languages**: Python | SQL | JavaScript

**Data Science Libraries:** NumPy & Pandas | PySpark | Excel

**Cloud Platform: Data Engineering & Cloud Platforms:** Databricks | Airflow | ETL Pipelines | Data Lake | Data Modelling | Data Warehousing | Automation  | AWS S3 | AWS Glue | AWS Services | MySQL | MS SQL | TablePlus

**Front-End Web Development:** HTML | CSS | Tailwind CSS | React.js

**Key Skills:** Team Player | Time Management | Adaptability | Problem-solving | Critical Thinking

## WORK EXPERIENCE

Troika Research Technologies
**Data Engineer – Jan 2024 to Oct 2025**
Worked on scalable ETL systems to process large-scale banking transaction data, focusing on automating pipelines with Python (Pandas, PySpark), AWS (S3, Glue), and Databricks. Utilized TablePlus for database management, data validation, and query optimization across MySQL and Redshift environments. Involved in improving data quality for accurate reporting, supporting fraud analytics with Redshift and Athena, and contributing to Data Lake architecture for performance optimization. Additionally, collaborated on front-end web development tasks using HTML, CSS, Tailwind CSS, JavaScript, and React.js to create interactive data dashboards and visualization interfaces for business insights.

## INTERESTS

Data Engineering | Cloud Technologies | Python | Big Data | Automation | Continuous Learning

## PROJECTS

1. **Customer Transaction Data Processing System (Jan 2024 – Oct 2025)**

- **Project Objective:** Banking / Financial Services
- **Approach: Developed a scalable system to collect, clean, and analyze daily customer transaction data from bank branches and ATMs.** Automated ETL processes using Python and Pandas to process data from CSV/JSON files and PostgreSQL databases. Standardized and validated data using Pandas and SQL, ensuring high-quality financial reporting. Designed a modular data pipeline architecture with raw, processed, and curated layers for long-term scalability. Integrated processed data into PostgreSQL for centralized analytics supporting fraud detection, compliance, and business insights. Built interactive visualizations in Jupyter Notebook using Seaborn and Matplotlib to visualize branch performance, transaction trends, and fraud indicators for management.
- **Technologies used:** Python (Pandas) | PostgreSQL | Jupyter Notebook | Seaborn | Matplotlib | CSV/JSON

2. **Stock Data Vizualization (Personal Project)**

- **Project Objective:** Banking / Investment Analytics
- **Approach:** Developed a data lake solution for analyzing stock market and banking transaction data. Utilized Jupyter Notebook for data exploration and Python (Pandas) for data wrangling and transformation. Stored processed datasets in PostgreSQL for structured querying and reporting, leveraging TablePlus for efficient database management, validation, and query optimization. Built interactive visualizations using Seaborn and Matplotlib to uncover market trends and investment insights. Focused on improving data accuracy and performance through indexing, query optimization, and modularized workflows.
- **Technologies used:** Python (Pandas), PostgreSQL, Jupyter Notebook, Seaborn, Matplotlib, TablePlus

3. **Portfolio Website (Front-End Development Project)**

- **Project Objective:** Build a personal portfolio website to showcase technical projects, data engineering work, and front-end development skills.
- **Approach:** Designed and developed a responsive web portfolio using **HTML, CSS, Tailwind CSS, JavaScript, and React.js**. Focused on creating a clean, modern user interface with smooth navigation and reusable components. Integrated dynamic project sections to highlight Data Engineering and Visualization work, ensuring performance optimization and scalability.
- **Technologies used:** HTML, CSS, Tailwind CSS, JavaScript, React.js

## EDUCATION

| Course | Institution | Year |
|---|---|---|
| Bachelor of Engineering (Computer Science & Engineering) | Nehru Institute of Engineering and Technology | 2019 - 2023 |
| HSC | SDA Matric Hr Sec School | 2018 - 2019 |
| SSLC | SDA Matric Hr Sec School | 2016 - 2017 |