



**NIKHIL SUBHASH SHINDE  
10712528**

Experienced **Senior Software Engineer** and Tech Lead with **over 11 years** of expertise in software development, data engineering, and cloud architecture. Skilled in designing and implementing scalable, high-performance systems, with a strong focus on data pipelines, ETL processes, and real-time data solutions. Proficient in leveraging Python, Flask/Fast API, and cloud platforms to build robust APIs and backend services. Passionate about solving complex business problems in the capital markets and asset management domains by combining expertise in **data engineering**, software development, and emerging technologies like machine learning. Adept at leading teams, architecting end-to-end solutions, and driving innovation through efficient data-driven strategies. Committed to delivering impactful results by bridging the gap between software engineering and advanced data solutions.

Proficient in machine learning, NLP, and **Generative AI (GenAI),** with expertise in designing scalable AI-driven modules and APIs using Python, Flask/Fast API, and cloud-based cognitive services.

|  |  |
| --- | --- |
| *Work Experience* | |
| *Sr Data Engineer* | **L&T Mindtree** Aug 2022 – Till present |
| *Sr Quant Report Engineer* | **Krishana capital** Apr 2022 – Aug 2022 |
| *Sr Analytic engineer << - Sr Software Engineer* | **Catchmedia Inc** Jun 2018 – Apr 2022 |
| *Team leader << - Sr Software Engineer* | **Orion Lab LLP** Sep 2015 – Mar 2018 |
| *Sr Software Engineer* | **Tejora Technologies LTD.** Sep 2014 – Jan 2015 |
| *Web Application engineer* | **Virtual Clearks.** Apr 2012 – Aug 2014 |

|  |
| --- |
| **Project Experience** |

|  |  |
| --- | --- |
| Project 1 -LTIM | POC CAPITAL GROUP – *I*nformatica infra to AWS  POC DATA-WORKFLOW-SPARK |
| **Role:** | AWS / SPARK Lead |
| **Duration** | FEB 2024 – CURRENT |
| **Team Size** | 3+ |
| **Project Overview** | Led a Proof-of-Concept (POC) initiative to modernize legacy **Informatica-based ETL infrastructure** by migrating workflows to a **cloud-native architecture using AWS and Apache Spark**. |
| **Responsibilities** | * Analysed existing **Informatica PowerCenter mappings**, workflows, and dependencies to design an equivalent **Spark-based ETL framework**. * Implemented **PySpark-based batch data pipelines** for data ingestion, transformation, and load into the target system. * DATASWITCH AI tool improvisation |

|  |  |
| --- | --- |
| Project 2 -LTIM | S&P Global – Data Quality Reporting  BIFORST ASSET MGM DATA-TNM-MI |
| **Role:** | Technical Lead |
| **Duration** | Sep 2024 – JAN 2025 |
| **Team Size** | 15+ |
| **Project Overview** | Developed a centralized platform for enterprise-wide **data quality monitoring and reporting** across various business domains like CI, MI, SFI, and Physical Assets. |
| **Responsibilities** | * Designed scalable data quality pipelines using AWS Glue, DataBrew, and Kinesis, implementing SageMaker Processing Jobs for automated feature engineering and hashing-based deduplication * Built real-time anomaly detection systems with dynamic threshold calculation through SageMaker inference endpoints * Developed Amazon QuickSight dashboards tracking 15+ metrics including missing values, duplicate patterns, and data freshness scores * Implemented data versioning with SageMaker Feature Store integration for historical quality trend analysis * Support development to provider rating algorithms using Sage Maker model training on quality KPIs (completeness, timeliness, accuracy) * Documented quality frameworks and mentored QA teams in validating ML-powered threshold configurations |
|  | AWS, Glue, Kinesis, sage maker, S3, DataBrew, SQL, Python |

|  |  |
| --- | --- |
| Project 3 -LTIM | S&P Global – Data Quality Reporting  BIFORST ASSET MGM DATA-TNM-MI |
| **Role:** | Technical Lead |
| **Duration** | Jan 2024 – Dec 2024 |
| **Team Size** | 15+ |
| **Project Overview** | Led the design and development of large-scale **data ingestion and transformation pipelines** for capital markets and asset data across CI, MI, SFI, and physical assets. |
| **Responsibilities** | * Designed **data lake architecture** and developed pipelines using **AWS (Glue, Lambda)** and **GCP (BigQuery, Cloud Functions)**. * Standardized **entity hierarchies and identifiers** across different sources. * Built **real-time streaming ETL flows** using **Spark and Kafka** for faster availability of critical market data. * Created JIRA stories, architectural diagrams, and documentation for seamless execution. * Guided data engineering and QA teams on data validation, versioning, and performance checks. * Supported ML team by preparing and cleaning training datasets. |
| **Technologies** | Python, Spark, Kafka, Databricks, AWS (S3, Glue, Lambda), GCP BigQuery, SQL, JIRA, Postgres |

|  |  |
| --- | --- |
| Project  4 -LTIM | Citi Bank – Global Credit Data Centralization (WLCR)  WLCR |
| **Role:** | Senior Software Engineer |
| **Duration** | SEP 2022 -DEC 2023 |
| **Team Size** | 7 |
| **Project Overview** | Migrated regional credit and asset data into a centralized, **standardized global format** to ensure data consistency and regulatory compliance.. |
| **Responsibilities** | * Transitioned application architecture from single-threaded to **multi-data processing pipelines**. * Implemented **Kafka-based message queue system** and a unique ID generator service for record tracking. * Developed modules for **data publishing and republishing**, including retry and scheduler logic. * Enhanced **DB pooling logic** to improve query performance. * Managed environment setup (SIT, UAT, PROD) and VM configuration across regions. |
| **Technologies** | Python, Kafka, PostgreSQL, Shell Scripting, Jenkins, Helm, UDeploy, CMP, GIT |

|  |  |
| --- | --- |
| Project  5 - Freelancer | Trading View Signal Integration & Paper Trading |
| **Role:** | Team lead |
| **Duration** | May 2022 – Aug 2022 |
| **Team Size** | 7 |
| **Project Overview** | Developed a **paper trading platform** that triggered trades based on **TradingView signals**. |
| **Responsibilities** | * Built a modular **Python-based backtesting engine** using **Pandas** for historical trade simulation and strategy validation. * Integrated **TradingView Webhooks** with dynamic endpoint mapping via Pipedream to automate trade signal ingestion. * Converted validated strategies to **Pine Script** and deployed them on TradingView charts for real-time performance observation. * Developed a lightweight interface to manage strategy inputs, configure parameters, and **track trade history and metrics**. * Leveraged **Azure Text Analytics API** for **sentiment classification** of signal descriptions and user inputs to enrich trade decision-making. * Implemented ***Azure Functions*** for serverless processing and **Blob Storage** for data persistence. * Created RESTful APIs using **FastAPI** to expose key functionalities and support seamless front-end integration  Designed and developed a **Generative AI module** to support **intelligent trade recommendations and conversational insights** based on TradingView signals. * Implemented a **speech and sentiment analysis engine** to analyze user commentary, trading room discussions, and signal narratives—calculating metrics such as **speech rate**, **fillers**, and **emotional tone**. * Integrated the sentiment output into the **paper trading interface**, enriching decision-making with contextual intelligence. * Enhanced strategy mapping with **LLM-based interpretation** of trading signals to offer **natural language summaries and alerts**. |
| **Technologies** | Python, Pine Script, PHP, Pandas, Excel, Pipedream API, Webhook, **Azure Functions, Text Analytics API** |

|  |  |
| --- | --- |
| Project  6- Freelancer | STOCK 500 Back testing module |
| **Role:** | Software engineer |
| **Duration** | JAN 2022 – Aug 2022 |
| **Team Size** | 2 |
| **Project Overview** | Built advanced quantitative trading analysis modules using AI-driven strategies and back-testing frameworks |
| **Responsibilities** | * **Design and Development**: Architect, design, and develop advanced quantitative trading analysis modules utilizing AI-driven strategies and back-testing frameworks. * **Algorithm Development**: Research, prototype, and implement machine learning models and algorithms suitable for quantitative trading strategies, ensuring robustness, efficiency, and accuracy in various market conditions. * **Integration and Testing**: Integrate developed modules into existing trading platforms, ensuring compatibility and functionality across different environments. Conduct thorough testing, including unit testing and scenario-based testing, to validate algorithmic performance and reliability. * **Optimization and Performance Tuning**: Optimize trading algorithms for performance metrics such as latency, throughput, and execution quality. Implement performance tuning techniques to enhance algorithmic efficiency and responsiveness. * **Risk Management**: Collaborate with risk management teams to incorporate risk controls and compliance measures into trading algorithms. Ensure adherence to regulatory guidelines and risk limits. |
| **Technologies** | Python, RabbitMQ, Redis, kdb+, Direct Market Access (DMA) APIs,Bloomberg, Algorithmic Trading Libraries,QuantLib, TA-Lib, scarpy |

|  |  |
| --- | --- |
| Project  7- Catchmedia | SALT (Media Analytics Tool) |
| **Role:** | Software engineer |
| **Duration** | Full Stack Developer / Data Engineer |
| **Team Size** | 20 |
| **Project Overview** | Developed a robust **media analytics platform** for real-time tracking and reporting across web, mobile, and OTT devices. |
| **Responsibilities** | * Built **data extraction and transformation modules** using Python and Go. * Developed **real-time analytics** using network sockets and highcharts visualization. * Integrated data from multiple sources (KDB+, Vertica, MySQL) into centralized reports. * Created user-defined reports and dashboards for end users. |
| **Technologies** | Python, Go, MySQL, KDB+, Vertica, PHP, Highcharts, AngularJS1, AWS, GCP |

**Other Notable Projects**

* **Market Data Aggregation with KDB+:** Created a system to normalize and aggregate global exchange data feeds for financial trend analysis.
* **HFT PNL & Trade Management (Krishna Capital):** Built a real-time PNL tracker and trade execution manager for high-frequency trading operations.
* **Angel One SALT (Finance Analytics):** Led development of a finance analytics tool offering dashboards for strategic investment decisions.
* **Talk LAW (Legal ERP):** Developed a legal management platform improving case tracking and documentation.
* **Wrappd.com (Web Data Engine):** Developed scraping infrastructure and regex-based content rewriting engine.
* **Axis Bank Settlement System:** Built a core system for managing settlement workflows and reports for accurate reconciliations.

|  |
| --- |
| **TECHNICAL ACHIVEMENT** |

* Successfully create pipeline for 3 crore records and 841gb data in 30 - 40 min using airflow parallel executors
* Successfully executed an ETL process for 1 crore (10 million) records in just 1.20 seconds, demonstrating exceptional performance optimization skills.
* Successfully executed an SDP DATA publish process in 1 sec which publish < 30 mb data per sec
* Created Web scarping module to fetch Product data from any ecommerce platform with dynamic regular expression.
* GO & Regex: help find patterns and extract data in large metadata file (2GB)
* Developed AXIS Bank letter generator module (multiple file extensions) with High performance
* design solution for high performance Millions records process in 1 sec
* Created Custom tableau module for granularity data
* Created module for back-testing stock data with custom indicator and create report accordingly
* Created viral website and support for not getting crash server by having trillion of visitor in 1 day (Slapamir.com)
* Created Chat event handler (XMPP For older Browser)
* charts and reports and dashboards
* Created modules for ejabberd
* Media Analytics metadata stored and Created customize Report
* Created Realtime Commodity Data candlestick charts
* Created a proprietary framework for Orion Labs
* Experienced To use FRAMWORK like YII
* Created proprietary ORM and Cache library and also having experience to use serval third party libraries and extensions.
* Created custom search module using elastic search with geo location

|  |  |
| --- | --- |
| **Educational Qualification** | |
| **Education & Credentials** | MSC Mathematics in 2025 (Presently ongoing).  Bachelor in Computer Application (B.C.A) in 2013.  Bachelor in Computer Application (B. Com) in 2012.  **LICENSES & CERTIFICATIONS**   * **GitHub Professional Certificate**, GitHub, Issued Jan 2024 * **Level Up: Python**, LinkedIn, Issued Jan 2024 * **Python Essential Training**, LinkedIn, Issued Jan 2024 * **Python Object-Oriented Programming**, LinkedIn, Issued Jan 2024 * **Python Professional Certificate**, OpenEDG Python Institute, Issued Jan 2024 * **ChatGPT and Generative AI: The Big Picture**, Pluralsight, Issued Dec 2023 * **Getting Started on Prompt Engineering with Generative AI**, Pluralsight, Issued Dec 2 |