

Janvi Raina

Mobile: +91-8928241865

Email: janvi.raina9@gmail.com

EDUCATION

V.J.T.I. Mumbai

Bachelor of Technology in Electronics and Telecommunications; GPA: 8.68

Mixed Higher Secondary School

Higher Secondary Certificate (HSC); Percentage: 95.2

Maharashtra, India

July 2022

Jammu and Kashmir, India

July 2018

SKILLS

Proficient: Java, Maven, Spring, JUnit, Mockito, Git, Solace, Linux

Familiar: Python, Flask, HTML5, CSS, JavaScript

EXPERIENCE

Wells Fargo

Software Engineer

Bengaluru, Karnataka

July 2024 - Present

Serialization Enhancements: Optimized CAMM (OpenHFT off-heap object) to JSON serialization for BulkFlow trades across multiple facades in the automation framework. Replaced inefficient log grepping, reducing test execution time by **0.5s per case** and cutting total suite runtime by **30 minutes**, significantly improving system throughput.

End-to-End Non-FIX Gateway Automation: Developed a **non-FIX gateway automation microservice** for post-trade flow testing, extending automation capabilities beyond FIX-based gateways.

Optimized D2C Regression Testing: Developed a tool to simulating market data flow using the PMDP API, enabling direct data publishing to MDT via one-tick ingress files. This decoupled D2C testing from D2D testing, reducing wait times by **2-3 hours per week** and improving efficiency.

Enhanced IRS Flow Automation: Improved the IRS automation framework by eliminating dependencies on legacy libraries and reducing reliance on multiple configuration files. Enhanced the FIX simulator to streamline workflows, resulting in a more lightweight and efficient automation process.

Java 17 Migration: Led the migration from **Java 8 to Java 17**, addressing deprecated APIs, ensuring compatibility, and optimizing performance. Refactored code, updated dependencies, and conducted extensive testing and benchmarking for seamless framework integration.

Wells Fargo

Program Associate

Bengaluru, Karnataka

July 2022 - July 2023

Stress Testing Tool Enhancement: Implemented thread pinning across RFQ flow services, enhancing RFQ assessment accuracy and optimizing service throughput. Calculated improved execution times by analyzing log data to measure the time taken from RFQ initiation to service completion, resulting in significant operational efficiency gains.

Automated Service Monitoring and Log Parsing: Simplified operations for over **50+ developers by improving real-time monitoring capabilities**.

OneTick Data Integration: Implemented OneTick solutions for multiple business requirements, leveraging Java, Spring XML, Solace thread configuration and custom code.

Introduction of Matched Maturity Swaps: Led the integration of a new product, **Matched Maturity Swaps**, into existing systems. Data extracted and transformed from reference data services into a usable format for CAMM services, facilitating seamless integration and operational efficiency gains.

AIRPIX Geoanalytics

AI and ML Research Intern

Mumbai, Maharashtra

June 2020

Video Analytics: Developed AI-powered real-time object detection models for monitoring social distancing and mask violations, achieving **93.24% accuracy**.

Intruder Detection in ROI: Engineered a real-time intruder detection system using Python and OpenCV, implementing advanced algorithm tuning to minimize false positives.

PROJECTS

QUIC vs TCP: Developed an application using the aioquic implementation to analyze and compare QUIC and TCP protocols. Evaluated key performance metrics such as latency, throughput, and reliability, providing insights into modern network protocol efficiency.

Predicting Anxiety During COVID: Executed final-year project on Twitter sentiment analysis to predict anxiety and depression trends during the COVID-19 pandemic using python NLP techniques.

ACHIEVEMENTS

Manager Spotlight Award: Successfully migrated **six application** stacks from Philly to Pico within a strict **one-month deadline**. Managed critical infrastructure changes, including Solace VPN modifications, firewall issue resolution, and necessary configuration and code adjustments.

LINKS

Github: janviraina LinkedIn: janviraina Website: janviraina.github.io

POSITIONS OF RESPONSIBILITY

- Represented the Electronic Trading team at the Market Square Event, showcasing innovations in low-latency trading. Highlighted advanced techniques such as off-heap memory management for **GC optimization**, along with the use of **Aeron** and **Solarflare** to efficiently process over **250 million market data ticks daily**.