

🎓 EDUCATION

- Stony Brook University** New York, U.S.A.
Master of Science in Computer Science; GPA: 3.93 2019 – 2021
 - **Courses:** Analysis of Algorithms, Data Science, Natural Language Processing
 - **Teaching Assistant:** CSE 214 - Data Structures
- University of Mumbai** Mumbai, India
Bachelor of Engineering in Information Technology; First Class with Distinction (72.9%) 2011 – 2015
 - **Relevant Courses:** Data Structures and Algorithms, Operating Systems, Discrete Mathematics

📊 EXPERIENCE

- J.P. Morgan Chase & Co.** Mumbai, India
Senior Application Developer Feb 2018 – Aug 2019
 - **Data Access Control System (DACS) Authentication:** Ensuring secure access to live prices from Bloomberg. Instrumental in helping the firm avoid any audit issues and reduced subscription costs per trader by 50%.
 - **Trader Analytics:** Implemented functionalities such as absolute and percent variation, market share and standard deviation of stock prices based on historic data to assist traders in making better decisions.
 - **Memory Optimization:** Performance tuning of heap consumption and G1 Garbage Collection through careful analysis of humongous allocations resulting in 80% fewer memory related issues.
 - **Real-Time Pricing:** Developed a component which approximates market risk in real-time from live underlying prices; and publishes the results for consumption. It helped retire a legacy system thus saving the firm ~\$250k.
- Application Developer* July 2015 – Jan 2018
 - **Risk Management System:** Worked extensively on the core app used by traders for visualizing and hedging risk;
 1. Optimized the Positions feed using LMax Disruptor, a low latency queue library for upto 20% faster processing.
 2. Process startup time improvement by 50% through the use of concurrency and Spring annotations.
 - **Market Data Source:** Framework for validating the functionality of the critical market data publisher and reporting results using Java MXBeans and Apache POI. Reduced the manual testing effort by 90%.
 - **Quick-Deploy:** Streamlined the deployment, startup and health check of application modules in production to bring down the release time by 66%.
 - **MongoDB High availability:** Mechanism to switch from replica set to standalone configuration on the fly in case of a data center failure. Ensured business continuity during critical failures and reduced operational risk.

⚙️ SKILLS

- **Languages:** Java, Python, Unix Shell Scripting, SQL
- **Frameworks:** Spring, Spring-Boot, Swagger, Apache POI, Java MBeans, JMS, Pandas, JBehave
- **CI Tools:** Gradle, Team City, Git, Bitbucket, Ant, Jenkins, YourKit
- **Databases:** Sybase ASE, MongoDB, MySQL

🏠 PROJECTS

- **Chess Player Ratings:** A regression model to predict the Elo rating of a player from the moves sequence data.
- **Toxic Online Comments:** Deep learning model for identifying Toxicity in Wikipedia comments.
- **Email Template Generator:** Built on the handlebars framework, creates templates to send out reactive email alerts.
- **Pratham NGO:** A system to keep track of the underprivileged students supported by the NGO. Migrated data from Salesforce to Azure SQL using Pentaho Kettle and developed a Java utility for reporting faulty data.
- **Reliable UDP:** Server-Client Exchange with Checksum validation and re-transmission in case of corrupt data.
- **Physual(Capstone):** Text to scene system to visualize Mechanics problems using NLP, Java 3D and Blender Models.
- **Machine Learning/NLP:** 'Inverted Index Builder', 'News Article Classifier', 'Products Review Sentiment Analyser', 'Songs Recommender System' and 'Similar Document Clustering System' based on tf-idf and page rank algorithms.