Shubham Srivastava

SENIOR SOFTWARE ENGINEER
BLOOMBERG LP
FIXED INCOME TRADING PLATFORM
ELECTRONIC TRADING

~ 8 years of Experience

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Details

(973) 874-8563 shubham.s.del@gmail.com ss14687@nyu.edu

Links

LinkedIn

Github

Skills

JAVA

Version Control: Git

Data Structures and Algorithms

Python

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Software Design Patterns

Systems Design

Databases

Machine Learning

Shell Scripting

Distributed Systems

Project Management

Artificial Intelligence

C++

Javascript/Typescript

RAPID

BAS

Bloomberg Terminal

Work Experience

Bloomberg LPSenior Software Engineer, Electronic Trading

New York, NY, US Sep 2022 — Present

- Worked across teams to add support for multiple intermediating brokers behind the Bridge workflow on List Trading, Single Security Trading, and Automation Trading workflows. This should have a huge upside for buy-side clients trading in emerging markets.
- Driving an effort to research and define SLOs for all our C++ backend systems for FIT tickets, and leveraging an internal monitoring system for consistent observability dashboards and alerting around asset classes, workflows, and SLIs.
- Worked across teams to add MBS support to the Bloomberg function RBLD, Optimized existing call graphs, and improved the latency SLAs for MBS by over 60% in the process.
- Conceptualized an engineering solution for Sort Best rules at desk level, which is something that clients were heavily pushing for for improved maintainability. Clients are beginning to use this feature.
- Worked on several high-impact projects wrt Bloomberg functions RBYI, FTKT, RBLD and Smartbot.

Flipkart Internet Pvt Ltd (acquired by Walmart)

Bengaluru, India

Senior Software Engineer (SDE-3)

Oct 2020 — Jan 2021

- Collaboratively redesigned the user-facing gateway routing system that powered the all user-facing APIs (supporting over 200 million users, interacting with 50+ micro-services)
- Captured the end-to-end use-cases of, and identified the anti-patterns in, the monolith legacy system spanning over 300k lines of code
- Suggested a design that had clear ownership and separation of components, which would result in better maintainability and developer productivity, as opposed to the previous system

Senior Software Engineer (SDE-2)

JAN 2017 — SEP 2020

- Regulated the design, development, maintenance, and disaster-recovery-plan of multiple high-scale (up to 900k queries-per-second) systems
- Designed, developed, and maintained the user-facing API layer platform, enabling collaborative API development across 15+ internal teams
- Drove the efforts on a fault-tolerant, high-scale, multi-tenant session management platform leveraging extensive system design skills, HBase, Memcached, and the write-through-cache pattern
- Org Building and Collaboration: Worked with 20+ teams on several cross-functional initiatives. Mentored 15+ teammates on several projects (helped them ramp up/grow/improve)

Software Development Engineer (SDE-1)

Jul 2015 — Dec 2016

- Delivered several impactful API projects (such as reviews, product exchange, etc.) as a part of the team that managed all user-facing APIs. These APIs were critical for Flipkart UI components
- Demonstrated good knowledge of the org-specific functional domain, and quick learning skills while working in product details aggregator framework (new product service)
- Leveraged LocustIO and GCP understanding to actively contribute to sale-readiness (up to 10x usual load) initiatives for multiple major sales

Software Development Engineering Intern

IAN 2015 — JUN 2015

• Worked on reverse-geo-coding system internal to Flipkart, which was critical for location-based personalization. Scale-tested the system for up to 5k queries per second.

Education

MS in Information Systems

Jan 2021 — Aug 2022

New York University (Courant Institute of Mathematical Sciences)

New York, NY

Relevant Courses: Database Systems, Fundamental Algorithms, Artificial Intelligence, Operating Systems,

Advanced Topics in Database Systems, Foundations of Finance, Strategy, Entrepreneurship

Bachelors in Information and Communication TechnologyJul 2011 — May 2015
Dhirubhai Ambani Institute of Information and Communication Technology
India

Academic Projects

- **OS-related:** Implemented thread-pool in C, using POSIX Threads. Leveraged this thread-pool to create a parallelized Run Length Encoder in C. Created a shell in the C programming language.
- Artificial Intelligence: Created a path-finder in JAVA that could use several complex algorithms such as ASTAR, Iterative Deepening, BFS, and DFS to search paths in graphs. Additionally, created a BNF to CNF converter, and a DPLL Solver in JAVA. Created a Markov Decision Process resolver using Policy Iteration.
- Worked as a Grading/Course Assistant for several courses in NYU Machine Learning in Bioinformatics, Applied Cryptography, Programming in Python, Database Systems

Additional Skills and Details

Languages: Java, Python, SQL, C, Shell Scripting,, JavaScript, C++, Typescript

Frameworks: Dropwizard, Vertx, gRPC, flask, RAPID, BAS

Databases: MySQL, OracleSQL, Memcached, MongoDB, Aerospike, HBase, Redis, Couchbase, Comdb2

Tools/Technologies: Storm, Kafka, GCP, RabbitMQ, Spark, LocustIO, Grafana

Data Science/Libraries: Sklearn, pandas, NumPy, Matplotlib, Hystrix, Guava, Jackson

Other Certifications/Courses: Udacity Nanodegree for 'ML Basics'