

Tanay Saxena

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Education

MS - Software Engineering Systems, Northeastern University Boston, US, **GPA - 3.9** (May 2023)
B.Tech - Computer Science, Jaypee Institute of Information Technology Noida, India (July 2019)

Skills

Technical: Java, Scala, C++, algorithms, data structures, Spring boot, Teradata, Spark, Kafka

Software: IntelliJ, Visual studio code, Visual Studio, kubernetes, Jira, Jenkins, docker, git, Linux

Others: Problem-solving, Agile methodology, Scrum, Unit testing, Integration testing

Work Experience

JAVA Developer Engineer Intern, SAP Ariba Boston (May 2022 - Nov 2022)

- Developed file append encryption API by encrypting chunks of input stream for plain text-based file formats to avoid the decrypt-append-encrypt loop for large files, improving runtimes by 30%.
- Integrated Kafka broker to encryption manager to make fault-tolerant batch processes that enable bi-yearly key rotation re-encryption.

Consultant, Morgan Stanley (Client), Accolite Digital, Mumbai, India (Jun 2019 - Sep 2021)

- Optimized Spring MVC-based REST API by reducing database calls and modifying Teradata stored procedure by using bulk operations. Reduced overall time from 20 minutes down to 10-15 seconds.
- Designed ETL-based python processes for automation of daily trading calculations performed by the finance department saving 2 hours of manual effort by 200 users.
- Migrated a .NET based desktop application (~2000 users) to angular which involved data grid-related features (reading, writing, operations on the grid) on angular and Spring MVC.
- Enhanced a trade signoff MV-VM architecture based application by adding bulk account (100K) upload feature in .net framework and spring backend.
- Demonstrated 40% performance gains in the data warehouse application suite by 'In-memory processing' as a proof of concept (Annual Technology Innovation Program).

Software Engineer Intern, Accolite Digital, New Delhi, India (Feb 2019 - May 2019)

- Designed features for an online programming website intended for tech employee interviews (~3000 candidates monthly). Delivered features like - Saving candidate's code to cloud, Compiling and running tests for .net framework, C++, python, etc based assignments.
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Projects

[Big Data With Spark](#) | [Scala, JAVA, Spark streaming, Kafka, Spring boot, Chart.js]

- Designed a multi-tiered system architecture for analyzing the correlation between streaming tweets and top-rated song lyrics.
 - Developed spark streaming job to read tweets from Kafka topic, tokenize and calculate feature vectors for cosine similarity calculation.
 - Implemented chart.js to visualize the cosine similarity metric via bar graphs and pie charts.
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Achievements

- Secured 509th rank in [Google Kickstart Round C](#) 2018
- Scored a maximum of 1461 rating on [codeforces](#) and rank 207 - [Code Gladiators](#) 2018