

SRASHTI GUPTA

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EDUCATION

Master of Science, Computer Science

GPA: 4.0

Northeastern University, Boston, MA

Expected: May 2027

Coursework: Algorithms, Computer Systems, Database Management Systems, Programming Design Paradigm

Bachelor of Technology, Information Technology

GPA: 3.7

Banasthali Vidyapith, Rajasthan, India

May 2019

Coursework: Data Structures, Theory of Computation, OOP, Software Engineering, Data Mining, Artificial Intelligence

TECHNICAL SKILLS

Languages: Java, Python, C++, Rust, JavaScript, Node.js, SQL, R, Shell Scripting

Backend & Frameworks: Spring Boot, Spring Data JPA, Hibernate, Microservices, RESTful APIs, React

Databases: DynamoDB, PostgreSQL, MySQL, MongoDB, Redis, Oracle

Cloud & DevOps: AWS (S3, EC2, Lambda, RDS, SQS, SNS, Bedrock, CloudFront, Cognito, IAM), Docker, Kubernetes, Linux

Tools & Messaging: Apache Kafka, Step Functions, CI/CD, Maven, Gradle, Swagger/OpenAPI, JUnit, Mockito, TestNG

Concepts: OOP, Multithreading, Serverless Architecture, Generative AI, Prompt Engineering, System Design, Event-Driven Architecture, Agile/Scrum, TDD

PROJECTS

Sage - AI Research Synthesizer | Java 25, REST APIs, AWS Lambda, Bedrock, React, DynamoDB May 2026

- Built serverless GenAI research platform on **AWS**, 5-state **Step Functions** pipeline runs 3 parallel **Bedrock** Claude threads on live web data via Tavily, synthesizing a structured report in under **45s** (60% faster than sequential), live on **CloudFront** with **Cognito** JWT auth, **DynamoDB**, and PDF export

Adaptive Concurrent Web Server | Rust, Python, Shell Scripting, Systems Programming March 2026

- Built multi-threaded **Rust** web server with adaptive worker pool to eliminate P99 latency spikes under bursty traffic, pool dynamically scales thread count based on real-time load using OS-level concurrency, cutting P99 from **1.73ms to 1.04ms** (40% reduction) at **31,725 req/s**

Streaming Analytics Data Warehouse | R, MySQL, Docker December 2025

- Designed year-partitioned star schema in **MySQL** and built Dockerized **R**-based ETL pipeline processing **98K+** streaming records, surfacing peak engagement trends across 3+ years of viewership data

EXPERIENCE

Senior Software Engineer, NAB Global Innovation Center India February 2023 - July 2025

- Optimized **20+ RESTful APIs** processing **1M+** daily requests via database indexing, **Redis** caching, and **OAuth 2.0/JWT** on **AWS** (S3, EC2, SQS, SNS) with **Kubernetes**, slashed latency by **35%** and received STAR Award for technical excellence
- Spearheaded 4-month **Java 8 to Java 17** migration of 20 banking microservices, resolving critical CVEs and replacing deprecated **Spring Security** imports, leveraged **Apache Kafka**, **MongoDB**, and **Gradle** across distributed systems
- Prototyped deployment tracking dashboard for **20+ engineering teams** to eliminate manual status reporting, increased monitoring visibility by **80%** and earned SPOT Award for innovation
- Coached **5 junior engineers** on microservices and **TDD**, accelerating team velocity by **15%** sustaining **92%** code coverage

Software Engineer, IBM India April 2021 - December 2022

- Architected event-driven microservices using **Spring Data JPA**, **Hibernate**, and **PostgreSQL** with Circuit Breaker and Saga patterns, eliminating cascading failures and improving system performance by **45%**
- Delivered automated **CI/CD** pipelines using **Jenkins** and **Docker**, cutting release cycle time by **40%** across 10+ microservices, standardized API docs via **Swagger/OpenAPI** and managed **Oracle** databases
- Launched full-stack feature with **React** and **Spring Boot** that drove a **40%** increase in daily active users and average session time across the client portal

Software Engineer, Capgemini Engineering January 2019 - March 2021

- Resolved performance bottlenecks across **14 microservices** for enterprise clients **Samsung** and **Hughes.net**, reducing system response time by **25%**, received Team Excellence Award
- Optimized **SQL** queries for RESTful services backed by **H2** database, reducing data retrieval time by **30%**, achieved **98%** code coverage using **TestNG** and **Mockito**