Rajat Sharma

23decrajat@gmail.com | (857) 407-9232 | Boston, MA | LinkedIn | GitHub

EDUCATION

Northeastern University, Boston, Massachusetts, USA Master of Science in Information Systems, GPA – 3.810 Sept 2022 - Dec 2024

Guru Gobind Singh Indraprastha University, Delhi, India

Bachelor of Technology in Electronics and Communication Engineering

May 2007 - Apr 2011

TECHNICAL SKILLS

Frontend Technologies

JavaScript (ES6+), TypeScript, HTML5, React, Hooks, Next.JS, GraphQL, Redux, Redux Toolkit, Angular.js, CSS3, Sass, Styled-Components, Tailwind, CSS Module, Storybook, Figma

Testing library & Framework

Jest, Enzyme, React Testing Library, Cypress, NightWatch.js, JUnit, Mockito, Spring Testing Framework

Backend Technologies

Java, Spring Framework, Spring Boot, Spring MVC, Spring Security, Spring Data JPA, Spring Cloud, OAuth2, JWT, MFA, SSL/TLS, AES encryption, Apache Kafka, OpenAI/Swagger

Cloud and DevOps

AWS (EC2, S3, RDS, Lambda), Azure, Pulumi, Packer, Docker, Kubernetes, GoCD, GitHub Actions, Jenkins, Prometheus, Grafana, Splunk

Architecture

Microservices, Micro-frontend, Design Systems, SPA, SSR, PWA, Serverless

Databases

MySQL, Oracle, MongoDB, Redis, PostgreSQL, Flyway, Hibernate, JPA

Web Server and Build Tools

Apache Tomcat, Nginx, Express.js, Webpack, Maven, Gradle, Parcel

PROFESSIONAL EXPERIENCE

New York Life Insurance, New York, USA, Software Engineer Co-op

Jan 2024 - Aug 2024

- Strategized and accelerated the **React 18 upgrade and release**, implementing advanced hooks and optimizing Redux store with Redux Toolkit, reducing rendering time by 30% and enhancing performance by 20%
- Architected and implemented **reusable** React components using **Styled-Components** for CSS-in-JS, reducing 40% code duplication
- Composed and upheld **RESTful** endpoints using **Java Spring Boot**, integrating with Sales Central, NYL internal, and third-party APIs
- Strategized and accelerated the **RBAC** upgrade, **refactoring** Sales Central Team's REST APIs for batch CRUD operations, boosting performance by 30%, reducing duplicate efforts, enhancing security, and simplifying administration by 20%.
- Oversaw CI/CD and AWS services (Code Pipeline, EC2, S3, Amazon RDS), monthly releases and urgent bug fixes

McKinsey & Company, India and Boston, New York, USA, Senior Lead Engineer

Oct 2016 - Aug 2022

- Collaborated with Firm Design team to create Design System React, TypeScript, and Storybook, and Bootstrap theme,
 standardized UX across 20+ teams, halved development time and costs for accessible web applications, and saved over \$200k
- Pioneered Micro-frontend using Webpack Module Federation for modular code sharing and seamless integration across technology-agnostic applications, obtaining a 25% faster feature deployment and a 30% deduction in development time
- Drove frontend excellence through **performance optimizations** (code splitting, lazy loading, Redux normalization) and robust testing (Jest, React Testing Library), resulting in 40% faster load times, 85% test coverage, and 60% fewer production bugs
- Drafted and spearheaded **RESTful Microservices** development with **Spring Boot, Node.js** and **Apache Kafka**, cutting module development and testing time and resources by 33%.
- Strengthened security with Multi-Factor Authentication, Single Sign-On and OAuth2, optimized JSON Web Token validation, cut malicious requests by 50% through rate limiting and RBAC, and ensured 99.9% data protection with SSL/TLS and AES encryption
- Devised testing and build processes, and deployed over 10 projects leveraging GoCD, GitHub Actions, Docker, Kubernetes, and AWS with YAML, bash and shell Scripts, and infrastructure as code, shortening deployment time by 75% and accelerated releases
- Facilitated cross-functional collaboration and vendor management across New York and Boston offices, optimizing planning, architecture, delivering high-impact, customer-facing solutions with a 35% productivity boost and substantial cost savings

Nagarro, India, Senior Associate Technology

Jul 2014 - Sep 2016

- Constructed and managed comprehensive reusable component libraries in Angular and React, diminishing development efforts by 25%, while obtaining a 20% decrease in load times through code refactoring
- Consulted closely with **client designers** to brainstorm and implement **UX enhancements**, achieving a 30% decrease in the number of clicks required for user actions
- Launched application **CI/CD** workflows with **Jenkins** tool, optimizing development and deployment processes and easing release cycle times by 50%. Further subduing post-release issues by 40% through stringent **linting** and **testing** procedures

Infosys Limited, India, Senior System Engineer

Dec 2011 – Jul 2014

- Designed and developed creative, reusable **Microsoft Silverlight** widgets and controls to improve user experience, enhancing web control interaction time and responsiveness by 30%
- Engineered and optimized data access logic for databases and external services, while refactoring frontend and backend code, resulting in 40% improved data retrieval latency and enhanced system performance

AWS Certified Solutions Architect - Associate [2]

Microsoft Certified: Azure Fundamentals

PROJECTS

GuideMe (React, Redux, Spring Boot, PostgreSQL)

Jan 2024 – Aug 2024

- Strategically upgraded existing components and dependent libraries to **React 18**, integrating advanced features to enhance functionality and performance
- Programmed RESTful endpoints and RBAC using Spring Boot, Spring Security and Spring MVC framework to cut the time & resources by a third needed for autonomous module development and testing
- Administered monthly releases and streamlined CI/CD pipelines utilizing AWS services such as CodePipeline, EC2, S3, and Amazon RDS, ensuring smooth and efficient deployments
- Revamped codebase to **enhance security** and **performance**, eliminating redundancy and complexity, and introduced Custom Batch APIs, significantly reducing network calls and duplicate code

Alumni Center (React, Redux, TypeScript, Spring Boot, Oracle, MySQL, Azure, AWS)

Jun 2020 - Aug 2022

- Headed a team of 12 software engineers in architecting, executing, and delivering cloud-native applications, utilized Micro
 Frontends for React, Angular, and JavaScript applications and Microservices for Spring Boot, Ruby on Rails, and Node services
- Implemented React lazy loading, code splitting with React.lazy and Suspense, memoization using React.memo, and custom hooks for optimized data fetching, significantly reducing initial loading time and bundle size by one-third
- Constructed **RESTful** endpoint using **Spring Boot** with **Spring Security, Spring JPA,** and **Hibernate ORM,** optimizing data queries and caching, which reduced response times by 40% and improved system reliability
- Streamlined build and deployment processes through DevOps contributions, leveraging GoCD, GitHub Actions, Azure Web Services, AWS Lambda, CloudFront, S3 Bucket, Docker, and Kubernetes for automated workflows
- Executed comprehensive monitoring, analytics, and alerting, utilizing **Prometheus, Grafana, Splunk, and SonarQube**. This bolstered application availability and reliability, leading to a 30% decrease in incident response

McKElections (React, Redux, Node, NightWatchJS, Docker, Kubernetes, MySQL)

Mar 2017 - May 2020

- Presented MVP, secured project approval, and assisted a 10-member vendor team for end-to-end project development and delivery by utilizing the agile principle
- Pioneered a reusable **Pattern Library, Micro-frontend,** and **Microservices architecture**, reducing development and testing time and resources by one-third for autonomous module development
- Enforced comprehensive security measures, including **MultiFactor** & **JSON Web Token authentication**, **role-based access control** (**RBAC**) for access restriction, and encryption for both data in transit (SSL/TLS) and data at rest (AES)
- Generate CI/CD pipeline using GoCD, Docker, and Kubernetes, enabling seamless deployment and scaling of applications while
 ensuring efficient and reliable software delivery

McKinsey Design Systems (React, Bootstrap, Emotion, StoryBook, CDN, NPM, JFrog)

May 2019 - Oct 2019

- Coordinated with the Firm Design team to deliver the Firm **Design System**, a **React** library in **TypeScript**, and a **Bootstrap** theme. This initiative standardized the **user experience** and improved **web accessibility** for the consumer web application
- Established a **CI/CD** pipeline with **JFrog NPM service** for the secure and efficient release of the Design System library. This encompassed secure storage, dependable **versioning**, and the seamless **distribution** of **npm packages**, dependencies, and associated artifacts