




# Jay Rana

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## TECHNICAL SKILLS

**Languages** : Java, Python, JavaScript, TypeScript, HTML5, CSS, C/C++, SQL  
**Frameworks/Libraries** : React, Spring Boot, Hibernate, Node.js, JUnit Testing framework, Mockito  
**Databases** : MongoDB, MySQL, DynamoDB, PostgreSQL  
**Tools & Technologies** : AWS, Azure, Docker, Azure DevOps, GCP, Kubernetes, Git/GitLab, Jenkins, Postman, Selenium, Maven, VS Code, IntelliJ IDE, MS Teams, Outlook, Word and Excel  
**Concepts** : Linux Operating System, Agile methodologies, Software Development Life Cycle, CI/CD, Terraform, SOLID Principles, Object Oriented Programming (OOP), Test Driven Development, RESTful services

## GRADUATE PROJECTS

- TrimTrek** | *Java, Spring Boot, React, MySQL, JUnit 5, CI/CD, Git, SOLID* |  *May 2023 - Aug 2023*
- Developed a comprehensive Barber Booking and Scheduling App designed to facilitate easy and efficient appointment scheduling with barbers.
  - Applied Observer, Decorator, and Factory design patterns to improve code quality and maintainability.
  - Adopting a test-driven development approach with 95% code coverage.
  - Tracked project progress using Git and JIRA, and managed the continuous deployment process using a CI/CD pipeline.
- TriviaTitans** | *AWS Lambda, AWS Cognito, DynamoDB, AWS Lex, ReactJS, Node.js* |  *May 2023 - Aug 2023*
- Developed a serverless multi-cloud online trivia game, showcasing real-time competition and progress tracking.
  - Architected a microservices-based solution utilizing both AWS & GCP, demonstrating versatility in cloud platforms.
  - Utilized DynamoDB for persistent storage of user and team data, ensuring data integrity and fast retrieval.
  - Managed backend operations through a combination of Google Cloud Functions and AWS Lambda functions.
- PodcastTranscription** | *ReactJS, Node.js, AWS Lambda, AWS EC2, Transcribe, CloudFormation* |  *Sept 2023 - Dec 2023*
- Developed an innovative app for seamless podcast transcription, enhancing accessibility and content discovery.
  - Automated AWS CloudFormation deployment, cutting resource provisioning time by 20% for faster, more efficient system performance.
  - Deployed the frontend on AWS EC2 and managed backend processes through serverless AWS Lambda functions.
  - Focused on high transcription accuracy, rapid processing speed, scalability, user-friendly interface, and cost efficiency.

## PROFESSIONAL EXPERIENCE

- Software Development Engineer** | *JPMorgan Chase & Co.* *Jun 2021 – Sept 2021*
- Contributed to the development of enterprise-level applications utilizing Java-J2EE and the Spring framework, showcasing strong technical and collaborative skills.
  - Implemented REST APIs within a layered Spring architecture and utilized Hibernate for database operations.
  - Attained practical expertise in the application of software development methodologies, securing adherence to industry best practices and standards in software design and implementation.
  - Boosted understanding and application of cloud technologies, including Docker and Kubernetes, by 40%, facilitating scalable and secure cloud-based solutions.
- Web Developer** | *Institute of Plasma Research* *Dec 2021 - May 2022*
- Spearheaded the design and implementation of seamless API integrations with backend services, enhancing functionality and data flow in full-stack web applications for optimal performance, in alignment with Agile methodologies.
  - Implemented centralized application state management using Redux, achieving a 35% improvement in data synchronization efficiency and application state handling.
  - Enhanced team excellence and project delivery through targeted mentorship, streamlined code reviews, and strategic architectural guidance, fostering an Agile and collaborative work environment.
  - Elevate web app performance by 70% through strategic use of caching, code splitting, and async programming, markedly improving user experience across all web platforms.

## EDUCATION

- Dalhousie University, Halifax, NS** *Jan 2023 – Present*  
Master of Applied Computer Science *CGPA: 3.8/4.3*
- Dharmsinh Desai University, Nadiad, Gujarat** *Jul 2018 – May 2022*  
Bachelor of Technology in Computer Engineering *CPI: 8.1/10.0*