

Jay Rana

+1 (902)-989-7570 | [jy834177@dal.ca](mailto: jy834177@dal.ca) | in/jay-rana/ | [github/jayrana](https://github.com/jayrana)

TECHNICAL SKILLS

Languages : Python, Java, JavaScript, HTML5, CSS3, C/C++, SQL
Frameworks/Libraries : React, Angular, Spring Boot, NodeJS, Express.js, Mongoose
Databases : MySQL, MongoDB, DynamoDB
Tools & Technologies : MATLAB, AutoCAD (Basic), AWS, Docker, Jenkins, Terraform, Git/GitLab, Postman, Maven, VS Code, IntelliJ IDE, MS Outlook, Word, Teams and Excel
Concepts : Linux, Agile Methodologies, Embedded Systems, Software Development Life Cycle (SDLC), CI/CD, Test Driven Development (TDD), Signal Processing Techniques, Infrastructure as Code

GRADUATE PROJECTS

Image Processing Toolbox | *MATLAB, App Designer* | [!\[\]\(d66ff64371a51729ac8c1cdaa685ba6f_img.jpg\)](#) Jan 2024 - Apr 2024

- Developed custom solutions to bypass MATLAB's Image Processing Toolbox, enabling license-free deployment.
- Empowered image manipulation through MATLAB's App Designer for intuitive interface and dynamic visualizations.
- Elevated user interaction with a sleek dropdown-driven workflow, streamlining intricate image transformations.
- Enabled seamless cross-platform functionality with a standalone package, ensuring effortless execution across diverse environments.

TrimTrek | *Java, Spring Boot, React, MySQL, JUnit 5, CI/CD, Git, SOLID* | [!\[\]\(003082e50e3009141f59bd5df831749f_img.jpg\)](#) 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* | [!\[\]\(faf942dc3e59ce8eb64b4ac481eca7e0_img.jpg\)](#) 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.

PROFESSIONAL EXPERIENCE

Software Developer | *TechNet Consultancy (5 months remote from Canada)* June 2022 - May 2023

- Utilized Core Java in the development of enterprise-level applications, demonstrating proficiency in foundational Java concepts and object-oriented programming principles.
- Engineered Spring Boot RESTful APIs to optimize data service interaction, seamlessly integrating MySQL databases for robust data management in client applications.
- Employed Agile software development methodologies, using Git for version control throughout all phases of the SDLC to improve product quality and accelerate delivery.
- Boosted understanding and application of cloud technologies, including Docker and Terraform, by 40%, facilitating scalable and secure cloud-based solutions.

Web Developer Intern | *Institute of Plasma Research* Dec 2021 - May 2022

- Redesigned and optimized front-end interfaces using HTML5, CSS3, and JavaScript to enhance interactivity and ensure seamless API integrations with backend services.
- Implemented centralized application state management using Redux, achieving a 35% improvement in data synchronization efficiency and application state handling.
- Proactively optimized code architectures, slashing load times and boosting service reliability, crucial for stellar cloud solution performance.
- 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: 3.85/4.3

Dharmsinh Desai University, Nadiad, Gujarat Jul 2018 – May 2022
Bachelor of Technology in Computer Engineering CPI: 8.1/10.0