

# Jaydeepsinh Raj

## SOTWARE ENGINEER

Toronto, ON | 416-879-8448 | [jraj4752@gmail.com](mailto:jraj4752@gmail.com) | <https://www.linkedin.com/in/jaydeepsinh-rai/>  
[www.jaydeepsinhraj.com](http://www.jaydeepsinhraj.com)

### Summary

---

Detail-oriented and proactive Software Engineer with hands-on experience in application development, automation testing, and cloud-based solutions. Adept in front-end and back-end technologies, database management, and continuous integration practices. Demonstrated expertise in developing and optimizing scalable applications within the casino, lottery, and gaming industries. Passionate about leveraging technology to solve complex problems and improve user experiences.

### Professional Work Experience

---

#### Software Engineer | IGT, Moncton NB

Jan 2025 – Present

- **Software Development & Architecture:** Lead the design, development, and maintenance of scalable software solutions across a variety of platforms, focusing on performance, scalability, and efficiency.
- **Collaborative Problem-Solving:** Work closely with cross-functional teams, including product managers, designers, and other engineers, to define technical requirements and create innovative solutions that meet business needs.
- **Automation & Continuous Integration:** Design and implement automated tests using tools such as Selenium, Pytest, and Java, integrated with CI/CD pipelines in Jenkins and GitHub to ensure seamless delivery and quality control across all environments.
- **Code Optimization & Performance Tuning:** Actively contribute to system performance improvements, utilizing profiling and debugging tools to optimize code for speed and memory usage.
- **Mentorship & Knowledge Sharing:** Provide mentorship to junior engineers by offering guidance on best practices for coding, testing, and debugging, fostering a culture of knowledge-sharing within the team.
- **End-to-End Application Lifecycle Management:** Oversee the entire lifecycle of applications from initial concept through development and deployment, ensuring software adheres to high-quality standards and meets regulatory compliance requirements.
- **Troubleshooting & Issue Resolution:** Identify, analyze, and resolve complex technical issues in a timely manner, working to minimize system downtime and maintain optimal user experience.
- **Agile Methodologies:** Actively participate in Agile ceremonies (daily standups, sprint planning, retrospectives) to continuously improve processes and ensure efficient delivery of features within project timelines.
- **Documentation & Reporting:** Create and maintain comprehensive documentation, including technical specifications, release notes, and system architecture diagrams, ensuring transparency and collaboration across all teams.

## Senior Software QA Engineer | BMM Testlabs, Moncton NB

Jan 2024 - Jan 2025

- Perform end-to-end quality assurance of gaming software, ensuring compliance with regulatory, jurisdictional, and functional specifications.
- Create and execute detailed test cases and scripts for automated and manual testing, ensuring high standards of software quality.
- Collaborate with cross-functional teams, including developers, project managers, and designers, to articulate issues and drive improvements in quality.
- Automate test cases using tools such as Selenium, Java, Maven, TestNG, and Python scripting, and integrate with CI/CD pipelines for continuous testing.
- Develop and maintain comprehensive test plans and detailed bug reports to ensure efficient troubleshooting and resolution.
- Regularly analyze game mechanics and verify implementation of game mathematics, providing clear updates throughout the project lifecycle.
- Mentor junior team members, providing guidance on testing processes and documentation best practices.

### Key Achievements:

- Spearheaded initiatives to implement risk management and control processes, ensuring higher product quality.
- Played a key role in enhancing defect tracking and issue resolution processes using JIRA, resulting in faster bug fixes and releases.

## Software QA Engineer | BMM Testlabs, Moncton NB

May 2022 - Jan 2024

- Performed comprehensive manual testing on slot games, progressive jackpots, table games, and mobile lottery platforms for North American and international jurisdictions.
- Validated game logic, random number generator (RNG) behavior, win/lose conditions, return-to-player (RTP) percentages, and mathematical correctness using specifications and regulatory test labs.
- Designed and executed manual test cases for functionality, boundary conditions, UI/UX, and compatibility across devices.
- Introduced automation into existing QA workflows using Java, TestNG, Maven, and Selenium, ensuring repeatable test scenarios for frequently updated titles.
- Worked closely with developers and test lab engineers to clarify requirements, reproduce bugs, and track defects via JIRA and internal test tracking systems.
- Participated in regression, smoke, and exploratory testing efforts before regulatory submission and production rollout.

## Education

---

### Seneca College, Toronto | Computer Programming | GPA 3.5/4.0

2021

- Software Development, Web Development, Distributed Programming, Database Administration, Security, Operating Systems (Windows, UNIX, Linux, IBM Business Computing)
- Expertise in UNIX and systems programming. Used a Linux environment for user and administrative commands, created scripts using shell scripting languages, and created programs using C, C++, Java and Python languages, implemented UNIX concepts such as processes, inter-process communication and sockets.
- Having extensive knowledge in Software Development Life Cycle: Researching, Modeling, Designing, Coding, Implementation, Testing and Debugging.
- Analyzed the business and functional requirements of the product/system. Working with the project team to review project plans, requirements specification, system design specification (SDS) documents, and computer software with teammates.

## Skills & Abilities

---

- **Software Quality Assurance:** Manual and automated testing, bug tracking, test case creation, exploratory testing
- **Software Development Lifecycle (SDLC):** Agile, Waterfall & DevOps
- **Automation Tools:** Selenium, Java, Maven, TestNG, Cypress, Pytest, Python scripting
- **CI/CD & DevOps:** GitHub, Git, Jenkins, Continuous Integration/Continuous Delivery
- **Database Technologies:** SQL, Oracle, MySQL, PostgreSQL, MongoDB
- **Development & Debugging Tools:** JIRA, TestNG
- **Programming & Scripting Languages:** C++, C#, Java, Python, Bash
- **Web Technologies:** HTML, XML, JSON, API
- **Cloud Computing:** Microsoft Azure, Amazon Web Services (AWS), Google Cloud Platform (GCP)
- **Quality Assurance Methodologies:** Agile/Scrum, Risk Management, Test-Driven Development (TDD)
- **Collaboration & Leadership:** Cross-functional collaboration, mentoring, documentation, and bug reporting
- **Game Testing:** Functional, non-functional, Regression, Exploratory, Usability, Smoke testing and game mechanics testing
- **Regulatory Understanding:** Gaming software compliance and jurisdictional requirements

## Certifications

---

- Microsoft Certified: Azure Fundamentals
- Cybersecurity – Digital Nova Scotia