

Hi, I'm Rakesh Vardan

Principal Software Engineer | Test Automation Architect

Designing robust, scalable, and future-ready test automation and CI/CD systems. With 15+ years of experience crafting innovative solutions for complex engineering challenges.

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About Me

With over 15 years of experience in the software industry, I've specialized in designing robust, scalable test automation frameworks and CI/CD pipelines that enable teams to deliver high-quality software with confidence.

As a Principal Software Engineer and Test Automation Architect, I'm passionate about creating efficient, maintainable automation solutions that solve real engineering challenges. My expertise spans across end-to-end testing, API testing, performance testing, and implementing DevOps practices that bridge the gap between development and operations.

Beyond my technical work, I'm dedicated to mentoring SDETs, sharing knowledge through my blog at blog.rakeshvardan.com, and contributing to the wider developer community through open-source projects and speaking engagements.



Test Automation

Expert in designing end-to-end test automation frameworks using Cypress, Selenium, and Playwright.



CI/CD Architecture

Designing scalable CI/CD pipelines with Jenkins, GitHub Actions, and Docker.



Full-Stack Development

Experienced in JavaScript, TypeScript, Node.js, React, and various backend technologies.



DevOps Practices

Implementing containerization, infrastructure as code, and cloud deployment strategies.



Engineering Leadership

Mentoring teams, driving best practices, and fostering a culture of quality and innovation.



AI-enabled Test Automation

Exploring AI-powered testing solutions and self-healing test automation frameworks.

Featured Accomplishments

LambdaTest Technical Author

Contributing valuable insights to the testing community through technical articles on test automation.

Contributing valuable insights to the testing community through technical articles on test automation, CI/CD, and software quality. My articles focus on practical implementations and best practices, helping teams improve their testing processes and delivery pipelines.

[Read Articles](#)

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← →

Projects

A showcase of my notable projects including test automation frameworks, CI/CD implementations, educational resources, and web development work. Each project demonstrates my commitment to code quality, innovation, and knowledge sharing.



Test Automation Framework (REST APIs)

Enterprise-grade Test Automation Framework for REST APIs using layered architecture. Features include extensive HTTP methods coverage, data-driven testing with TestNG, CI/CD pipeline integration, detailed test reporting with Allure, and containerized test execution.

[Java](#) [Testing](#) [REST Assured](#) [Allure](#) [Maven](#) [Docker](#)
[CI/CD](#)

[Code](#)

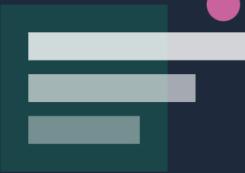


Full Stack Test Automation Framework

Comprehensive end-to-end testing solution covering both UI and API layers. Features page object model, cross-browser testing, parallel execution, cloud integration with LambdaTest, and rich HTML reporting. Demonstrates enterprise-level test architecture patterns.

[Java](#) [TestNG](#) [Selenium](#) [REST Assured](#) [ExtentReports](#)
[Jenkins](#) [Log4j2](#) [Maven](#)

[Code](#)



Modern Personal Portfolio

A responsive, accessible, and modern personal portfolio built with React, TypeScript, and Tailwind CSS. Features dark mode, smooth scroll navigation, dynamic content sections, and optimized performance. You're looking at it right now!

[React](#) [TypeScript](#) [Tailwind CSS](#) [Vite](#) [ESLint](#)

[Code](#)



CI Pipeline Examples

Collection of real-world CI/CD pipeline implementations using popular tools like SemaphoreCI, TravisCI, and Jenkins. Includes Docker integration, parallel test execution, and cloud testing platform integrations. Perfect reference for DevOps practices in test automation.

[CI/CD](#) [Docker](#) [Selenium](#) [LambdaTest](#) [Zalenium](#)
[TestNG](#) [Maven](#)

[Code](#)



API Testing Approaches Comparison

In-depth comparison and implementation of various API testing approaches in Java. Covers native HTTP clients, modern frameworks like REST Assured, and Spring ecosystem solutions. Includes performance benchmarks and best practices guide.

[Java](#) [REST Assured](#) [Spring](#) [HttpClient](#) [WebClient](#)
[JUnit](#)

[Code](#)



Testing Interview Guide

Comprehensive resource for test automation engineers featuring coding challenges, design patterns, and best practices. Includes hands-on examples covering core Java concepts, testing frameworks, and real interview questions from top tech companies.

[Java](#) [Data Structures](#) [Algorithms](#) [Testing](#)
[Design Patterns](#)

[Code](#)

Reviews & Testimonials



"Rakesh Vardhan has been an outstanding mentor in my journey to mastering automation testing. His expertise in Cypress, design patterns, JavaScript, and TypeScript, combined with his use of effective tools like Notion, has greatly enhanced my learning experience. Rakesh simplifies complex topics and makes them accessible, providing hands-on projects and tailored guidance. His approach fosters a growth mindset, encouraging continuous improvement and confidence in tackling testing challenges. I highly recommend Rakesh Vardhan to anyone looking to advance their automation testing skills. His mentorship has been invaluable."

Subhasish Sengupta

10 months ago



Blog

Thoughts, tutorials, and insights on test automation, CI/CD, Generative AI, and software engineering practices.

January 22, 2025

Transforming Our Automation Suite: From Challenges to Solutions

Improved automation reliability by migrating to Selenide, implementing modular design, and using smarter analysis tools...

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October 14, 2024

How to Utilize Java 'Records' in Test Automation

Java Records reduce boilerplate, enhance readability and maintainability in test automation, offering an alternative to Lombok's features...

[Read More →](#)

October 13, 2024

How I Improved Productivity with 'Regain' by Reducing Screen Time

Discover how using the 'Regain' app helped me reduce screen time, boost productivity, and improve mental well-being...

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Resume

Rakesh Vardan

Principal Software Engineer & Test Automation Architect

Professional Summary

Experienced Principal Software Engineer and Test Automation Architect with 15+ years of experience designing and implementing scalable test automation frameworks, CI/CD pipelines, and quality engineering practices. Proven track record of leading teams, mentoring engineers, and driving technical excellence across organizations.

Work Experience

Principal Software Engineer

Medtronic

Nov 2024 - Present

- Lead quality engineering and deliver compliant solutions for medical device software.
- Build scalable test automation frameworks and drive CI/CD in healthcare environments.
- Leverage Generative AI and develop utilities to boost automation efficiency and coverage.

- Collaborate cross-functionally to ensure safe, high-quality med-tech software delivery.

Lead SDET

EPAM Systems

Dec 2020 - Nov 2024

- Led design of enterprise test automation frameworks and drove DevOps transformation at Mastercard.
- Mentored and managed a team of 4 engineers, providing technical guidance and career development.
- Drove organizational initiatives at EPAM, including interviews, training, and knowledge-sharing.
- Led Generative AI PoC and evangelized AI-driven quality practices through demos and workshops.

Senior SDET

EPAM Systems

Apr 2017 - Dec 2020

- Led QA team to deliver a GDPR-compliant product for a global financial client in 9 months.
- Established test strategy, automation frameworks, and CI pipelines in an enterprise environment.
- Built robust test automation to support continuous integration and frequent releases.
- Collaborated with developers and stakeholders to ensure quality and enable fast feedback cycles.

Senior Professional Engineer

DXC Technology (formerly Computer Sciences Corporation)

Jul 2014 - Feb 2017

- Delivered automation and functional testing solutions for telecom and insurance clients, including onsite work in Sweden.
- Conducted real-device mobile testing and validated end-to-end telecom service lifecycles.
- Focused on system-level testing and collaborated with clients to ensure high-quality solutions.
- Identified automation opportunities and aligned testing with project timelines and quality goals.

Professional Engineer

DXC Technology (formerly Computer Sciences Corporation)

Apr 2011 - Jun 2014

- Worked on functional testing for a U.S.-based insurance client, ensuring application quality through detailed test plans and regression execution.
- Verified fixes and maintained traceability using defect tracking tools to support release readiness.
- Automated test reporting by developing Excel macros, improving efficiency across the QA team.
- Took on early team coordination responsibilities, laying the foundation for future leadership roles.

System Engineer

DXC Technology (formerly Computer Sciences Corporation)

Jan 2010 - Mar 2011

- Performed functional testing for a major healthcare client (NHS UK), ensuring system reliability and compliance.
- Logged reproducible bugs, verified fixes, and worked closely with developers on resolutions.
- Contributed to stable test automation using HP QTP, and explored early-stage automation with Selenium.

Education

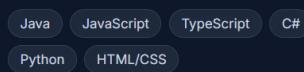
Bachelors of Technology

Jawaharlal Nehru Technological University, Anantapur

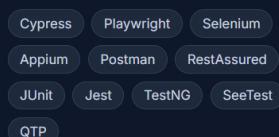
2005 - 2009

Technical Skills

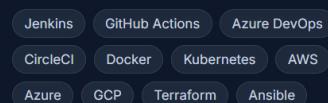
Languages



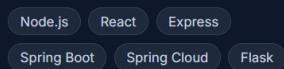
Test Automation



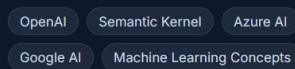
CI/CD & DevOps



Development Frameworks & Libraries



AI & ML



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Let's Connect

I'm always open to discussing new projects, opportunities in test automation, and collaborative ventures. Whether you have a specific project in mind or just want to connect, I'd love to hear from you.

 hello@rakeshvardan.com



Rakesh Vardan

Principal Software Engineer specializing in Test Automation Architecture, CI/CD pipelines, AI / ML and full-stack engineering.

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