

**PROFESSIONAL SUMMARY :**

- Proficient in automated testing frameworks and tools, including Selenium, Appium, Cucumber, Ranorex, TestNG, Cypress along with scripting languages like Python, JavaScript, TypeScript, and Shell Script for comprehensive API and SQL testing, ensuring thorough coverage and efficient bug detection.
- Experienced in API testing using tools like Postman and RestAssured, ensuring robust communication between the frontend and backend in applications.
- Adept at creating and executing comprehensive test plans, test cases, and scripts through both manual and automated methodologies to validate software functionality, performance, and scalability.
- Familiar with continuous integration/continuous deployment (CI/CD) pipelines, version control systems (e.g., GitHub), and agile development methodologies, facilitating seamless integration of testing processes into the software development lifecycle.

**SKILLS :**

Operating Systems / Platforms	Linux, Android, Windows, iOS, AR Glasses
Languages	C#, C++, Java, Android, Golang
Development Tools	VIM, Android Studio, VS Code, IntelliJ IDEA, Eclipse, Xcode
Test Automation / Debugging	Espresso, XCUITest, Katalon, Ranorex, Appium, Selenium, Cucumber, TestNG, Cypress, Postman, BrowserStack, LambdaTest, Node.js, Protractor, PyTest, TestRail, JMeter, LoadRunner
Scripts	Python, Javascript, Typescript, Shell Script
Continuous Integration	GitHub, GitHub Actions, Gerrit, JIRA, Jenkins, Ant, Maven
Cloud Computing	AWS, GCP, Docker, Kubernetes, DynamoDB, S3, Terraform
AI / ML / Cyber Security	Foundations on AI/ML and GenAI, ETL/Data Pipeline, Data Engineering, NoSQL, Data Warehouse, Python for DataScience and AI, Cyber Security

**PROFESSIONAL EXPERIENCE :****Senior SDET / Lead Test Engineer, USA**

Since Jan 2014

*Tasked with the development and enhancement of a SaaS-based enterprise application developed using React, NestJS, MongoDB and deployed on AWS. The project involved managing large-scale integrations and maintaining a distributed collaborative environment, focusing on automation testing, API testing, and cloud-based systems for the automotive, insurance, and manufacturing industries.*

- Primary point of contact for establishing the testing process for enterprise software test management activities.
- Developed comprehensive test strategies, executing test plans to ensure thorough testing of the product's functionalities and features, improving production test coverage by 90% through both manual testing and automation framework development.
- Implemented automated testing and integration for web applications across macOS and Windows platforms, covering browsers such as Chrome, Firefox, Safari, and Edge, using Python, Node.js, JavaScript, TypeScript, shell scripting, Selenium, Cypress, and Ranorex.

- Conducted automated testing for mobile platforms—including Android, iOS, and smart glasses—hosted on AWS, ensuring high product quality and reliability using Python, Node.js, JavaScript, TypeScript, shell scripting, Appium, and Java.
- Performed integration, system, and UI testing to verify seamless interaction between the React frontend and NestJS backend, ensuring accurate API responses and data flow with MongoDB.
- Implemented end-to-end testing with Cypress to simulate user interactions, covering the complete user journey from frontend to backend and database.
- Developed and implemented automated API testing frameworks using tools like Postman, RestAssured, curl scripts, and Groovy, streamlining API validation and significantly improving test efficiency and coverage.
- Integrated testing with BrowserStack, LambdaTest, and TestNG cloud test platforms to enhance coverage across multiple devices for Android and iOS.
- Integrated automation frameworks with CI/CD Jenkins pipelines, facilitating daily and release-based test runs that improved testing efficiency and streamlined CI processes.
- Developed and executed automated test scripts using Cucumber and TestNG to enhance the quality and performance of Android, iOS, and web applications, complementing existing testing efforts.
- Conducted automated testing for microservices deployed on AWS, utilizing tools such as Postman for API testing and Cucumber for behavior-driven development, ensuring high availability and performance.
- Implemented automated load, stress, scalability, BDD, and reliability testing to enhance product robustness and performance using JMeter, LoadRunner, and BlazeMeter.
- Performed localization testing for 17 different languages and generated comprehensive reports.
- Conducted User Interface (UI) and usability testing for mobile and web applications, ensuring an optimal user experience and accessibility.
- Improved bug management processes using JIRA, facilitating collaboration with cross-functional teams to enhance problem handling and reduce resolution time for reported issues.
- Utilized Generative AI test frameworks to analyze user stories and acceptance criteria, resulting in the automated generation of comprehensive test scripts that reflect desired features and functionalities.
- Monitored spam emails on production servers and formulated rules using regex to prevent spam, testing these filters before loading them into production environments that helped maintain the integrity of production environments and enhanced user security using python and shell scripts.

#### **Senior Engineer / Lead Engineer - Multiple Companies, India**

1996 - 2014

*Tasked with development and testing of telecom switches and wired phones, wireless and networking products with skills acquired in C, C++, Java, L1-L7 layers and CDMA.*

#### **EDUCATION :**

M.S. (EE) The University of Texas at San Antonio, Texas, USA.

1995

B.E. (ECE) University of Madras, Chennai, Tamil Nadu, India.

1990

#### **CERTIFICATIONS :**

PMP	Google Professional Certification	2024
Data Engineering	IBM - Data Engineering Professional Certification	2024
Cybersecurity Analyst	IBM - Cybersecurity Analyst Professional Certification	2024
AI Engineering	IBM AI Engineering Professional Certification	2024