

# Vikash Kumar Singh

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## EDUCATION

### Carnegie Mellon University

Master of Information Systems Management (**Distinction & Dean's List**)

Coursework: Database Management, Data Focused Python, Statistics and Probability, Distributed Systems, Object Oriented Programming in Java, A/B Testing Design and Analysis, Accounting and Finance, Economic Analysis

Pittsburgh, PA

**May 2023 – May 2024**

**GPA 3.82/4**

### Vellore Institute of Technology

Bachelor Of Technology in Electronics and Communication Engineering

Coursework: Problem Solving and Programming, Data Structures and Algorithms, Object Oriented Programming, Computer Organization and Architecture, Information Theory and Coding

Chennai, TN

**Jun 2015 – Apr 2019**

**GPA 3.9/4**

## SKILLS

**Testing and Automation Tools:** Selenium WebDriver, Junit, TestNG, Appium, Cucumber, Rest-Assured, Jenkins, Maven, JMeter, TestRail, Jira, Postman, Swagger, SOAPUI, Sauce Labs, POM, BDD, SDLC, STLC, Agile, Scrum

**Technical:** Java, Python, SQL, NoSQL, XML, HTML, JSON, Groovy, Gherkin, MySQL, Git, GitHub, CI/CD, Eclipse

**Others:** Manual Testing, Automation Testing, Performance Testing, API Testing, Mobile Testing, Database Testing, Regression Testing, Unit Testing, Integration Testing, System Testing, Acceptance Testing, Cross Browser Testing, Parallel Testing, Load Testing, White Box Testing, Black Box Testing

**Certifications:** ISTQB CTFL, Infosys Certified DevOps Professional, Infosys Certified Python Associate, Infosys Certified Selenium Advance Automation Tester, Infosys Global Agile Developer Certification, Scrum Inc - Registered Product Owner

## WORK EXPERIENCE

### Sustainable

Pittsburgh, PA

#### Quality Assurance Engineer

**Jan 2024 – Present**

- Developed a robust hybrid framework from scratch for comprehensive end-to-end UI testing, utilizing Selenium, TestNG, BDD.
- Migrated databases from Firebase to Azure Cosmos DB, ensuring seamless data transition and integrity, resulting in a 30% improvement in data retrieval times.
- Automated database testing using stored procedures, functions, triggers with Selenium, enhancing reliability and performance.

### Infosys

Chennai, TN

#### Test Analyst

**Oct 2022 – Apr 2023**

- Developed and maintained test automation scripts for SIT, QA, UAT, and PROD environments using Selenium WebDriver, Appium, Java, and TestNG, significantly reducing manual testing efforts by 50%.
- Utilized the Page Object Model (POM) and data-driven testing techniques to enhance test script maintainability and reusability.
- Created a robust Selenium framework integrating Log4j for effective logging, Extent Reports for comprehensive reporting, and configured parallel test execution and cross-browser testing, improving test efficiency and reliability.
- Implemented CI/CD pipelines in Jenkins and GitHub to automate build, test, and deployment processes, resulting in a 40% reduction in deployment time.
- Adopted Behavior Driven Development (BDD) with Cucumber to enhance communication with stakeholders, leading to increase in requirement clarity.
- Performed API testing using Postman and SOAPUI, automating the process with Postman collections, which increased testing efficiency by 30%.
- Documented test cases, test plans, and test results using TestRail and JIRA, improving test documentation accuracy significantly.
- Collaborated with development and product teams in Agile, Scrum environments to define test strategies and requirements, leading to a 25% reduction in defect leakage.

#### Test Engineer

**Jan 2020 – Sep 2022**

- Created and managed over 300 test cases and test scripts using TestNG and JUnit frameworks, increasing test coverage by 40%.
- Automated mobile testing (iOS and Android) using Appium and integrated tests into the CI/CD pipeline using Jenkins, reducing mobile testing time.
- Reviewed 350+ backend API endpoints using Postman, identifying and documenting bugs/defects, leading to a 20% improvement in API reliability.
- Designed and implemented a robust regression testing suite, reducing regression testing time by 40%.

#### Systems Engineer Trainee

**Dec 2018 – Dec 2019**

- Executed over 100 manual testing procedures to verify software functionality and performance.
- Assisted in the development of automated testing frameworks and tools, contributing to a 30% increase in testing efficiency.
- Analyzed Software Requirements Specification (SRS) documents to create comprehensive test plans, resulting in a reduction in requirement ambiguities.

## ACADEMIC PROJECTS

### TestMaestro - AI Test Automation Tool, Carnegie Mellon University

**Aug 2023 – Dec 2023**

- Ideated an automated AI testing tool with both cloud and on-premises options, integrated bug reporting and test case management.

### Automated E-Commerce Platform Testing, Carnegie Mellon University

**Jan 2024 – Apr 2024**

- Conducted manual and automated UI and API testing to validate web application functionality, usability, and performance.

## LEADERSHIP

### Teaching Assistant, Database Management, Carnegie Mellon University

**Aug 2023 – Dec 2023**

### Course Assistant, Product Management Essentials, Carnegie Mellon University

**Jan 2024 – May 2024**