TAPAS PATRA

Bengaluru, India | [Portfolio](#) | [LinkedIn](#)

8249124954 | tapas.patra0406@gmail.com

An Automation Engineer with four years of specialized experience in the automotive sector, skilled in architecting and deploying robust, end-to-end automation frameworks. Expertise in Python, the Slash Framework, and Android infotainment testing. Proven ability to manage the full Software Testing Life Cycle (STLC) and engineer tools that have increased automation efficiency by up to 40%. A dedicated professional focused on enhancing product quality and driving continuous improvement within Agile environments.

EXPERIENCE

AUTOMATION ENGINEER

Wipro Technologies | Bengaluru, India

2021 – PRESENT

- **Framework Architecture & Development:** Architected, designed (HLD), and implemented a new Python-based automation framework from the ground up for infotainment modules, reducing manual testing efforts by over 60%.
- **Process Automation & Efficiency:** Engineered UI-Autogen, a Python tool to automatically generate UI properties and their unit tests, increasing UI automation efficiency by 40%.
- **Test Management Optimization:** Developed custom tools (RTM Helper, Rail-Bridge, Testcrafter) to streamline processes in Jira and TestRail, which eliminated 100% of manual effort in RTM traceability and test case migration.
- **Test Strategy & Execution:** Designed and executed comprehensive test plans covering functional, regression, and integration testing using Data-Driven Testing (DDT) with YAML data sources, improving test coverage by 35%.
- **Code Quality & Mentorship:** Served as module owner, leading code reviews for peer-developed automation scripts to ensure adherence to best practices, improve code quality, and maintain framework integrity.
- **Defect Management:** Oversaw the end-to-end Defect Life Cycle (DLC) using Jira, collaborating with development teams to track, triage, and ensure the timely resolution of identified bugs.

EDUCATION

MASTER OF TECHNOLOGY IN SOFTWARE SYSTEMS | BITS PILANI | EXPECTED DEC 2025

BACHELOR OF COMPUTER APPLICATIONS | N.C. COLLEGE | JUNE 2021

SKILLS

- **Programming Languages:** Python
- **Automation Frameworks:** Selenium, Appium, Slash
- **Testing Methodologies:** Software Testing Life Cycle (STLC), Defect Life Cycle (DLC), Data-Driven Testing (DDT), Functional, Regression, & Integration Testing, Test Case Design & Optimization
- **API & Web Technologies:** REST API, FastAPI, Django, WebSockets, Caching (Redis)
- **Databases:** PostgreSQL

- **Automotive & Protocols:** CAN Protocol, ECU Testing, AUTOSAR Concepts, YAML,Audio,Media,Radio,Settings,WLAN
- **Tools & Platforms:** Git (Version Control), Jira (Defect Management), TestRail (Test Case Management)

TOOLS DEVELOPED

- **UI-Auto-gen:** Automated the generation of UI properties and unit tests from Android layouts to reduce manual setup time for test automation.
- **RTM Helper Tool:** Streamlined backward traceability by linking TestRail cases to Jira requirements, ensuring complete audit and reporting coverage.
- **Rail-Bridge:** A utility to migrate test cases, suites, and results between different TestRail server instances, facilitating seamless project transitions.
- **Test-crafter:** A productivity tool that reduces administrative overhead by enabling the bulk creation of test runs, plans, and milestones across multiple TestRail projects.
- **Test rail Insight:** A custom reporting solution that overcomes TestRail API limitations by aggregating data from unlimited test runs to generate comprehensive quality insight reports.