

# Agalya Ayyadurai

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## PROFESSIONAL SUMMARY

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*Highly motivated and experienced Test Automation Engineer* with over 6 years of experience in manual testing and 3+ years in automation testing, prioritising *innovative, reliable, and robust* test solutions. Proficient in *designing, developing, and maintaining test automation frameworks*, with a *keen eye for detail* for exceptional defect identification, earning the nickname 'Defect Detective'. Excelled in manually testing and creating *automated tests for web UI, API, and mobile* applications, ensuring the delivery of high-quality products to end users, as a sole tester for the current company.

## SUMMARY OF QUALIFICATIONS

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- *Designed, developed, and maintained an automation framework* using [Playwright, RestSharp, and Azure](#) for UI and API testing, integrated with CI/CD pipelines.
- *Created and maintained test data* using Admin APIs, SQL, dotenv (.env), appsettings.json and Excel with secure handling of sensitive data via AWS Secrets Manager.
- *Executed automated tests and analysed results* using HTML reports, and JSON responses to identify defects, and ensure quality across UI and API.
- *Documented test processes and results*, including Test Plans, Test Cases, RTM, and Test Results, using tools like Excel, Jira, and Confluence.
- *Triaged, isolated, and replicated software defects* using tools like logcat, developer tools, and API logs, providing *reports* with steps to reproduce, test data, environment details, screenshots, and expected vs. actual behaviour.
- *Collaborated with product and engineering teams* via Jira, MS Teams, and BitBucket, and *staying up-to-date with QA processes, tools and best practices* through LinkedIn Learning, GitHub projects, and regular cross-team knowledge-sharing sessions.

## AUTOMATION SKILLS & TOOLS

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|--------------|------------------|--------------|
| • Playwright | • RestAssured    | • JavaScript |
| • Cypress    | • RestSharp      | • TypeScript |
| • Selenium   | • Postman/Newman | • Python     |
| • Appium     | • SQL            | • Java       |
| • BDD        | • CI/CD          | • C#         |

## MANUAL TESTING SKILLS & TOOLS

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|-------------------------|----------------|-------------------------|
| • Defect Triage         | • Test Plan    | • Jira                  |
| • Logcat                | • Test Cases   | • Confluence            |
| • Developer Tools       | • RTM          | • LucidCharts           |
| • API Logs              | • Test Results | • Excel                 |
| • Mobile/Tablet Testing | • Web Testing  | • Cross-Browser Testing |

## PROFESSIONAL EXPERIENCE

**Software Test Engineer | siHealth Ltd**

Oxfordshire, UK - Hybrid | Aug 2020 - Present

**Tech Stack (Jira, BitBucket, Confluence, JavaScript, Pytest, Python, SQL, Postman, Android Studio, AWS, Excel, LucidCharts)**

- Demonstrated expertise in validating CE-marked *web and mobile applications* for sunburn protection, Vitamin D monitoring, and medical treatment management for skin conditions like Actinic Keratosis (AK) and Vitiligo, leading to the successful release of 3+ production-ready products with zero medium or high-severity defects reported in live environments.
- Conducted extensive integration testing across systems, including web portals for doctors and iOS/Android mobile apps for patients, *validating 150+ APIs*, testing 80+ data mappings, and designing over 200 test cases, edge cases, negative scenarios and *automating regression tests* using Pytest, Postman and JavaScript, reducing manual testing efforts by 40%.
- Thoroughly tested advanced dose calculation systems (PPIX, erythema, UVA, HEV blue, and Vitamin D) by simulating over 75+ combinations of user-provided inputs (e.g., skin phototype, sunscreen type, clothing, and environment) and system-detected factors (e.g., GPS location, weather, and time zone), ensuring reliable real-time monitoring and precise dose updates.
- Validated an AI-powered indoor/outdoor detection model integrated into mobile apps, ensuring sensor data accuracy from light, GPS, and accelerometer readings across devices. Tested dynamic scenarios (e.g., near buildings, under trees), optimised battery usage, and ensured the model seamlessly restarted services during daylight hours in diverse time zones and regions.
- Ensured Data Privacy and GDPR compliance by testing data anonymisation, masking patient photos, and validating secure credential hashing. Verified data aggregation and graphs for web portals, providing actionable insights for doctors, medical researchers and sunscreen brands.
- Gained *strong technical background with working knowledge of the SDLC*, gained through 2 years as a Project Manager implementing Agile practices using the Scrum framework, mentored teams on Agile best practices, and led sprint planning, standups, and backlog prioritisation with Jira and Confluence. Achieved three promotions within 15 months, reflecting consistent excellence in *communication, collaboration*, leadership, and technical understanding.

**Programmer Analyst | Cognizant Technology Solutions**

Chennai, India | Mar 2013 – Mar 2015

- Experienced with end-to-end manual testing processes, *validation of web services* and ensured the accuracy of over 100+ dynamically generated insurance document fields using advanced Excel techniques and Oracle SQL.
- Collaborated with cross-functional teams as a key member of the Root Cause Analysis team, identifying, documenting, and resolving recurring production issues, minimising future system downtime.

## EDUCATION

**University of Surrey | MSc Data Science with Professional Postgraduate Year**

2019 - 2021

**College of Engineering Guindy, Anna University | BE Industrial Engineering**

2008 - 2012