

## SUMMARY

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QA Engineer with 5+ years of experience in automation, performance and functional testing across web, mobile and cloud-native systems. Proficient with Python/Java automation using Selenium, PyTest and Appium. Proven expertise in testing ML applications, cloud pipelines and IoT devices testing. Strong experience in CI/CD, DevOps (Jenkins, Docker, GitHub), and cloud platforms including AWS and Azure. Interested in providing scalable solid and secure solutions with the help of test-driven development and cooperation in engineering practices.

## SKILLS

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- **Test Automation:** Python, Java - Selenium, Appium (Mobile), Springboot.
- **API Testing:** Postman, Pytest, GraphQL API
- **Performance Testing:** JMeter, Load/Stress testing, Performance optimization and scalability testing
- **CI/CD & DevOps:** Jenkins, GitHub, Git
- **Cloud & Mobile:** BrowserStack, Android studio and xcode.
- **Test Management Tools:** JIRA, TestRail.
- **Teamwork & Leadership:** Agile/Scrum, Sprint Planning, Team Coaching
- **Team management:** Team lead, Hiring process
- **Cloud/Containers platform:** AWS services (IAM, Elb, Ec2, Ebs, SQS/SNS, S3, Cloudwatch, Cloud9, Sagemaker), Docker, Azure (IoT hub)
- **Frameworks:** pytest, DTK (amazon owned), Pegasus (amazon owned)

## WORK EXPERIENCE – PROJECTS

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### AMAZON DEVELOPMENT CENTER, CHENNAI

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#### Amazon Astro - Home Robot (DIGITAL ASSOCIATE & SENIOR ASSOCIATE)

Nov 2018 - Dec 2021

Nov 2018 – Dec 2021

- Designed , executed manual and automated test cases for the **patrolling and image capture modes**, validating object detection logic, motion behavior and edge-case scenarios using annotated video and image datasets
- Tested Astro's interoperability with **Alexa skills, smart home devices and mobile apps** ensuring stability across voice and touch-triggered routines
- Built **Python-PyTest based automation** for internal ML web tools improving test cycle time and model interaction coverage
- Supported the ML development team by verifying the behavior of image recognition and decision modules by **developing validation scripts deployed** using **Amazon SageMaker** to simulate inference responses under real-world input conditions
- Evaluated model confidence thresholds and fallbacks under inconsistent lighting, angles and object distances improving reliability of ML outcomes
- Performed **performance and GUI testing** across web portals and control apps contributing to a **14% defect reduction** and enhanced user experience
- Served as the **domain QA expert for the VP module** and the **Starscream annotation platform** ensuring consistency and quality in training data workflows
- Collaborated with the DevOps team to integrate ML-inference validation and automation checks into the **CI/CD pipeline** enabling nightly verification of core ML functionalities
- Mentored new QA hires and testers on automation practices ML behavior verification strategies and data-centric test design

#### Amazon Payment Services (SUBJECT MATTER EXPERT, QUALITY SERVICES)

Dec 2021 - Jan 2023

- Served as a SME on secure payments and fraud detection flows such as Tabby, 3DS, STCPAY and various APIs to banks in the MENA region

- Tested the entire flow of event-driven payment microservices, combined through the AWS Lambda and API Gateway, Formulated PyTest-based automation in order to test REST APIs, which checked the issuance of tokens, transactions, webhook callback streams, and edge conditions
- Used Postman for manual and regression test APIs on staging as well as Production APIs
- Published - load high volume of transaction and performed load/performance testing with JMeter to ensure scalability among Lambda concurrency and throttling boundaries of API Gateway
- Achieved IAM permission validation, verified secure access to payment endpoints and audit compliant test case reviews Put together test workflows to manage message queues through SQS/SNS and such scheduling payments to repeatedly retry and asynchronous functionality were triggered appropriately
- Automated tests into CI/CD pipelines through Jenkins, invoked after a deployment to run post-deployment sanities and performance smoke suites Produced thorough bug reports on JIRA, streamlined bug lifecycles, and helped to increase defect triage by 20 percent in terms of reduced time to resolution
- collaborated with developers and Bas during sprint planning, held daily defect triages, and weekly created QA dashboards
- Managed and coached a group of 10 junior testers, led a series of trainings on cloud-native payment QA patterns, API security best practices and automation design

#### **Amazon D2AS (SUBJECT MATTER EXPERT, QUALITY SERVICES)**

**Jan 2023 - Dec 2023**

- Led QA of AI-driven solutions in chatbot systems (Rufus, customer assistant) implemented in all the Amazon ecosystem (Alexa, Fire Tabs, Prime Video, Echo)
- Planned and implemented chatbot UI and workflow automation suites mainly in Selenium (web) and Appium (mobile) on virtual environments as well as on actual devices
- Conducted REST and GraphQL API endpoint testing with PyTest + Requests, ensuring interaction patterns and NLP of the interactions plus API call outs and structure of the response payload Performance and scalability tests Identified thresholds to optimize backends based on Lambda-based handlers to peak load
- Conducted performance and scalability tests on chatbot services under peak load on JMeter Retained message flows working inwards hundreds of customers API Gateway, Lambda, SQS/SNS were fully integrated and validated to be real-time and ensured that the async messaging queues now worked with retries and failure alerts
- Secure API testing was incorporated into the CI/CD pipeline by using CodePipeline + Jenkins, automated validations checks were present on deployments and IAM role reach
- Leveraged AWS CloudWatch Logs and Metrics to monitor the API latency, invocation errors, and delays in the processing of the chatbots in real-time
- Examined and tried IAM-based access controls on the exposed chatbot APIs, and made sure both the least privilege ideas, and safeguarding of sensitive acceptance points
- Worked with AI/ML teams closely to verify inference response, fall backs and accuracy of intent-resolution in multiple languages
- Mentored a 16-engineer QA team, delivered KT lectures on automation best practices, cloud-native testing approaches, and security-driven regression architecture

#### **STEALH.DESIGN, DUBAI (remote)**

##### **FIVE – Websites, Ronin, Playa-pacha (QUALITY ASSURANCE ENGINEER)**

**July 2024 - Sep 2024**

- Planned and implemented QA plans on major traffic hotel and lifestyle websites (FIVE Hotels, Ronin, Playa Pacha), including booking systems, user account logins and mobile compatibility
- Performed Integration testing of 3rd party APIs (WhatsApp, Google Maps) in Postman to ensure reliable connectivity, rate limiting, failover support
- Designed and implemented Selenium-Python based automation test suites to cover end-to-end web and mobile cases of booking, payment and user onboarding Automated cross-platform (Appium + PyTest) automated testing on real and sim devices (BrowserStack, Android Studio, Xcode)
- Real time device telemetry simulated on smart hotel features, validation and end to end delivery of business logic to a Streamlit dashboard
- Built-in Prometheus monitoring that is used to monitor real-time telemetry ingestion statistics (message rate, API latency API queue depth), and set up of alerts when anomalies emerge on ingest pipelines and dashboards
- Performed benchmarking of performance using JMeter, profiled the use of resources as well as Prometheus metrics to find the bottlenecks in the system as well as degradation of the response
- Integrated all automated tests and load testing in CI/CD processes along with implementing Jenkins

- Performed continuous verification of platform scalability and observability features  
Liaised with developers, DevOps and UI/UX terminals in order to achieve optimal functionality, consistent alerting, and predictable telemetry presentation across cloud-linked interfacings

EDUCATION

Anna University, Chennai - Bachelor of Technology - IT - 6.1	Aug 2012 - May 2016
National College of Ireland, Dublin - Master of Science in Cloud Computing	Jan 2025 - Pursuing