#### **BALAJI DINAKARAN**

QA Specialist with AI Expertise









### **Professional Summary:**

Innovative and result-oriented QA Specialist with AI expertise, boasting 9 years of experience in manual and automated testing within Agile environments. Highly skilled in designing automation frameworks, implementing CI/CD processes, and leveraging AI technologies to enhance testing solutions. Proven ability in requirements gathering, business analysis, and ensuring robust testing practices. Adept at researching and solving complex problems, contributing to organizational growth and development.

## **Core Competencies:**

# **Programming Language**

✓ Python, C#, Java, Javascript

## **Automation Tools & Technology**

- √ Selenium, Appium
- ✓ API Postman
- ✓ API Automation Rest Assured, Rest Sharp, Request Library
- ✓ Python PyTest, JBehave BDD
- ✓ C# MSTest, NUnit, Specflow
- √ Java TestNG, JUnit, Cucumber, Maven
- √ Javascript Cypress, Mocha, Supertest
- ✓ FLAUI
- √ Atlassian JIRA & Confluence
- ✓ TestRail

### **Development Tools & Technology**

- ✓ C# Asp.net, Ado.net, Asp.net MVC 5, Javascript, VBA Macros, SSIS package
- ✓ MSSQL, MySQL, PostgreSQL

# **AI Skills and Technologies**

- Machine Learning Algorithms: Supervised, Unsupervised, Reinforcement Learning
- ✓ Data Preprocessing: Pandas, NumPy, Scikitlearn
- ✓ Computer Vision: OpenCV, Convolutional Neural Networks (CNNs)
- ✓ AI Model Evaluation: Cross-validation, A/B Testing, Precision/Recall, F1 Score
- AI Integration Testing: Testing Integrated AI models into software applications using APIs and microservices.

### CI/ CD & Version Controlling Tools

- ✓ GIT, Bitbucket, AWS Code commit, Gitlab
- ✓ Bamboo, Docker
- ✓ Jenkins, Git Actions, Azure Devops, Octopus

## **Domains**

✓ Manufacturing, Banking, Pharma Claim and Insurance, Fleet Management

#### **WORK EXPERIENCE:**

## Senior Test Automation Engineer - Perigord@VerizonConnect

Jan 2024 – Jun 2024 Dublin, IRL

- **Developed** comprehensive test plans and detailed test cases using **TestRail** and maintained robust automated test scripts for multiple teams with **Appium** using **C#**, **Request Library** using **Python** and **Robot Framework**.
- **Key Contributor** in customizing **Test Automation Framework** (TAF) at Verizon, supporting Web, Mobile, and API automation with integrated logs in **TestRail** and **JIRA**.
- Collaborated closely with development teams to review API and mobile specifications, identify test scenarios, and ensure alignment with business requirements.
- Designed and executed precise API test cases, adhering to industry best practices.
- Utilized **Postman** for thorough **API testing** and **Octopus** for automation deployment, ensuring smooth transitions to production environments.
- Managed test environments and data, ensuring MSSQL database compatibility and reliable testing outcomes.

- Implemented practice in short scale to document test cases, results, and defects thoroughly, effectively communicating findings to product owners.
- Collaborated with multiple teams, including the R&D team, on fleet data engineering and data analysis projects
  using Python and Al libraries such as SciPy, TensorFlow, Keras, and PyTorch.
- Developed dashboards with the development team to display fleet test data and QA test metrics.
- Configured Bamboo and Octopus pipelines to streamline automation execution processes.
- Shared extensive expertise in manual and automation testing techniques, providing mentorship and training to QA team members.

### Software Development Engineer in Test (SDET) - Exgen System@PDMI

Feb 2020 - Aug 2023

Remote (USA)

- PDMI is a **Pharma data management organization** which deals with **Pharmacy benefit management** and **Claim adjudication**.
- Collaborated with stakeholders to develop test plans to implement across projects following the test strategies, ensuring alignment with business goals.
- Streamlined standardized templates and formats for test cases to ensure consistency and clarity in automation implementation.
- Identified automation opportunities and implemented frameworks using Python, Postman, Selenium,
   Appium, Request Library, Pytest, Robot Framework, enhancing testing efficiency.
- Managed test environments, performed regression testing, and reported defects.
- Provided production support and conducted root cause analysis for issues in live environments.
- Led **defect and status calls**, presenting **critical defect walkthroughs** to stakeholders, ensuring **transparent communication** and **resolution**.
- Automated transfer of insurance flat file data from COBOL to MSSQL Server using Python scripts, improving efficiency.
- Specialized in testing data warehouses, pharmacy data on API endpoints, web applications, and MySQL databases.
- Implemented a mentorship program to foster professional growth of 8 testing resources.
- Ensured data manipulations and validations adhered to HIPAA standards and industrial norms.
- Configured and maintained automated testing frameworks integrated with Jenkins, AWS CodeCommit, and JIRA to streamline testing processes and ensure product quality.

### Senior QA Engineer/Test Automation Coach - Clear Code Consulting Services

Jun 2018 – Feb 2020

Chennai, India

- Involved in all stages of testing life cycle, including Test Driven Development methodologies and Agile SDLC.
- Developed comprehensive test plans, requirements traceability matrix, and compiled test summary data.
- Provided detailed test cases, scenarios, metrics, and estimation for test preparation.
- Proficient in **Selenium, Appium, FLAUI, and AutoIT** for automating web, windows, and mobile applications.
- Implemented various automation frameworks including Keyword Driven, Data Driven, Hybrid, Robot framework, and Behavior Driven Development (BDD).
- Designed robust Automation Frameworks using Java (Selenium, TestNG, Page Object Model), and C#
   (Appium, MSTest, Page Object Model) with integration for CI/CD pipelines.
- Automated Web Services using Rest Assured (Java) and Rest Sharp (C#).
- Expertise in BDD frameworks such as Cucumber (Java & Javascript) and Specflow (C#).
- Configured Jenkins to integrate with GitHub, Bitbucket, AWS CodeCommit repositories.
- Implemented automated build triggers using Bitbucket and GitHub webhooks.
- Managed source code and build configurations in Azure Devops to streamline CI workflows.
- Integrated Jenkins for deployment reports to JIRA, enhancing business management.
- Collaborated effectively with Developers, Agile Teams, and Project Management to ensure high-quality web, mobile, and windows automation, meeting release deadlines and improving QA processes.
- Served top companies including Oracle, Ericsson, Citi, Deloitte, Bank of America, IBM, Capgemini, UST Global, Mphasis, MetLife, Synechron, Mindtree, LTI Larsen & Toubro Infotech, DHL IT Services, CGI,

Barclays, HCL Technologies, Fiserv, Scientific Games, TIAA, Rakuten, JPMC, and many others globally, building robust automation solutions for web, mobile, and windows applications.

### Technology Analyst - Infosys Limited, Bangalore

Sep 2014 – Jun 2018

Bengaluru, India

- Requirement Gathering and Analysis, Development, Testing, and Maintenance using the Waterfall model.
- **Decrypted a 10-year-old application** to modify database details, avoiding redevelopment from scratch.
- Developed a unit-specific CHAT application to handle heavy load traffic using C#, ASP.NET, AJAX, and SQL.
- Created a **Data Reporting System** for the Planning team to track operational processes, enabling effective utilization of unit parameters and facilitating excel report uploads for web display.
- Developed and customized existing applications, including **MFG dashboard** modifications according to domain requirements.
- Designed web applications to assist the **Application Support team**, **automating repetitive tasks** and enhancing **efficiency**.
- Created databases for ETL testing and business development using MS-SQL.
- Extensive experience with SQL Server Integration Services (**SSIS**) for ETL processes, including data transfer from Excel, CSV, and flat files to MSSQL Server, and integration with dashboards.
- Identified automation difficulties, created automation scripts, and provided progress reports to management.
- Regularly modified and executed **automation scripts** using **python**, conducted training sessions for new team members, and collaborated with L2 teams to analyze and fix production issues.
- Hosted application using IIS Microsoft Webserver and configured automation pipeline using Jenkins.
- Migrated all web applications from Windows server to Azure Devops.

### **QUALIFICATIONS:**

- Masters in Artificial Intelligence, Dublin, Ireland Sep 2023 Aug 2024
- **B.E** From Sri Sairam Engineering College, Chennai, India April 2014.

### **Achievements:**

- Successfully completed 4 months of extensive training at Infosys Global Education Center.
- Infosys Certified Professional in C# Programming and SQL Server.
- Foundation Level Certificate from the International Software Testing Quality Board (CTFL-120441).
- Microsoft Certified Professional:
  - ✓ 70-483: Programming in C#
  - √ 70-461: Querying Microsoft SQL Server
  - ✓ 70-486: Developing ASP.NET MVC Web Applications
- Provided test automation ideas to top MNCs, including
  - ✓ Deloitte, IBM, TIAA, Finexus Inc. Malaysia, Cyient, Scientific Games, Oracle (India & USA), Qapitol QA, VFI-SLK (India & USA), National Computer Systems (Singapore), CGI, Ericsson, Citi, Rakuten, UnitedLex, LTI Larsen & Toubro Infotech, DHL IT Services (Malaysia), Mettler-Toledo International, Inc., Fiserv, Trainocate Malaysia, Novac Technology Solutions, Mindtree, HCL Technologies, Eurofins IT Solutions India Pvt. Ltd., EbixCash, Atos Syntel, Trianz, Persistent Systems, HARMAN International, Bank of America, Equiniti India, Analytics Quotient, CLSA, Virtusa, Mobily Infotech India Pvt. Ltd., Barclays, Capgemini, UST Global, Mphasis, Pactera (Singapore), MetLife, ZenSoft, Aurion Pro, Giesecke+Devrient, Celcom Mobile (Malaysia), Brillio, JPMC, Synechron, MicroFocus, MindBody, John Deere, Allianz SE.

Eager to bring my expertise and passion for technology to a dynamic team, driving success through innovation and dedication. Committed to delivering high-quality solutions, fostering collaboration, and continuously enhancing skills to stay ahead in the rapidly evolving field of QA and AI.

#### Balaji Dinakaran

**Dublin, Ireland**