





# Monisha S K Software Engineer - Testing monisha.9092@gmail.com +91-9448469209

# **Summary of experience:**

- ❖ 8.8 years of experience in the software industry. I am having valuable experience in Reviewing the Design and the Requirements of the Software, Planning the Tests, Designing the Tests, Setting up the Test Environment, Carrying out the Test, Final Reporting and Raising the Defects and follow up the same, Python/Shell Scripting, Automation.
- ❖ I have handled Responsibilities across technical solutions- code, document review, Module testing and System Component Testing, Feature Testing, Integration Testing, Unit Testing, Sanity, Regression, Migration Tests, Functional Testing, Adhoc Tests, Installation, Performance Testing, Performance Monitoring(shell/Python Scripting written ) and Performance Reporting.
- ❖ I am a Python Developer, have developed own **Python-Kubernetes framework** to Prevalidate the CISCO-P3/AWS Environment for its readiness to be consumed by QA Team, which highly reduced the Time cost by helping the team for early detection of environment related defects. I have developed many Python and shell Scripts in automating the repeated mundane task there by adding value to the Projects where I have worked for and saving the Time cost, which in turn helps in finding the bugs at the earliest.
- ❖ Majority of my experience has been in the Automation using Selenium Framework, Api Automation(REST Assured API) and in Python Scripting
- ❖ Have working experience in testing an application hosted in Cloud Technologies(Docker, Kubernetes, AWS, OCP) and testing Experience in Software Application which is spun across Digital, Telecom and Big Data Analytics(Hadoop, Kafka, RabbitMQ, MMQT, ActiveMQ, Splunk, ElasticSearch, Oozie, Rundeck, mapr, yarn)

- ❖ For past 2+ yrs I have been working on automating integration verification testcases for Watson AIOPS using Selenium Behave driven framework using python and API testing using Python libraries, which involved setting up of test environment for Rancher, ServiceNow, Zabbix, OpenStack etc on Fyre(IBM)
- ❖ For past 6 months have been working on automation of unit test cases of **Agent** which is a critical component of Instana(IBM) hence identifying critical bugs.
- **Strongly self-motivated, willing to take up challenging responsibilities.**
- Quick learner with excellent analytical, communication and interpersonal skills.
- ❖ Hardworking Individual contributor and good team member

#### **Professional Qualifications & Certifications:**

- ✓ Secured "Individual Excellence award from CISCO for the outstanding contribution towards the SDP Project"
- ✓ Secured "Team Excellence award for Asset Flow"
- ✓ Secured Silver Badge for "Aricent Young Engineer Certification for Selenium"
- ✓ Docker Essentials : A Developer Introduction issued by IBM

# **Professional Experience:**

Company	Designation	Duration
IBM India Pvt. Ltd.	Software Test Automation Developer	March 2021-till date
Neustar Pvt Limited, Bangalore	Software Test Engineer	Aug'19 – March 2021
Larsen and Toubro Infotech Limited, Bangalore	Software Test Engineer	April' 17 – July 19
Aricent Technologies Limited, Bangalore	Software Test Engineer	Jan'15 - April'17

## **Education:**

- □ Bachelor of Engineering in Electronics & Communications 2010-2014 Batch
  - at Sapthagiri College of Engineering, Bangalore Karnataka, India. (Affiliated to Visvesvaraya Technological University.)

# **Technical Skills:**

Skills	Details	
Domain	Digital, Telecom, Bigdata, AIOPS	
Operating System	Windows , LINUX(CentOS, Ubuntu)	
Cloud	Docker, Kubernetes, AWS, OCP	
Languages	C, C++, Basics of Core Java	
Scripting Languages	Python, Unix Shell Script, Groovy	
Big Data Analytics –Testing 1.5+ yrs.	Apache Hadoop, Apache Spark, Map Reduce, Kafka, yarn, Oozie, Kafka, RabbitMQ, MMQT, ActiveMQ, Splunk, ElasticSearch	
Automation Framework 2+yrs	Selenium Web driver, Rest Assured API Automation Testing Framework, Common Behave Framework (Gherkins Method)	
MiddleWare 3+ yrs.	Tomcat, ngnix	
XML/HTML 3+ yrs.	HTML, XML	
IDE	Eclipse, PyCharm, Wireshark, Putty, Winscp, Ride, Selenium IDE, Postman, Xshell, Wireshark, Putty, Winscp, IXIA, IntelliJ	
Test Case/Defect Management Tool	Testlink, Rally, TIMS(CISCO), Bugzilla, JIRA, TestRail(IBM)	
Source Version Control Tool	Git, Bitbucket, Jenkins	
Database and tools	MySql , SqlYog, Pgadmin, DBeaver, DB Replication	
Protocols	Samba, CIFS, FTP, TCP, UDP	
Cloud Tools	Docker, k8s, Openshift, exposed to [Rancher, Openstack, ServiceNow, VMWare NSx, Zabbix]	
Testing Practices	Design and the Requirements of the Software, Planning the Tests, Designing the Tests, Setting up the Test Environment, Carrying out the Test, Final Reporting and Raising the Defects, Automation	

## **Projects Profile**

Project #1: March 2021-till date

□ Client: IBM India Pvt. Ltd.

□ **Role:** Software Test Automation Developer

□ Project 1 Synopsis for Instana:

- IBM® Instana Observability (Instana) is a fully-automated application performance management (APM) solution designed for the challenges of managing microservice and cloud-native applications. Instana automatically makes your applications and services visible, provides context to that observed information, and then enables you to take intelligent action based on that information.
- Instana monitors and analyzes your applications, services, infrastructure, web browsers, mobile applications, and more for over 200 domain-specific technologies. In addition, Instana displays real-time data through distributed tracing and 1-second metrics.
- Instana automates dependency mapping across the full stack for flexible application perspectives and provides powerful and easy-to-use data analytics. You can drill down to generate new insights with infinite flexibility from the entire repository of application-request trace data.
- Instana informs you whenever your customers are impacted by performance or stability issues in your applications within a few seconds of impact. In addition, Instana automates root-cause analysis by using event correlation, performance thresholds, errors, changes, and analysis of service level agreement (SLA) violations. Instana puts performance data in context to deliver rapid issue prevention and remediation.

**Tools and technology used:** IBM Internal Tools, Google Cloud, Junit5, Mockito, Kanban, Git, Java, concourse etc

## My specific role/contribution in/to the project:

## **Automation Testing:**

- As part of QA Enablement team, involved in preparing Practical Guide for QA
  that enable delivery teams to adopt best practices enabling every engineer in the team to own QA
  responsibilities.
- Prepared Clean Coding Check list for the team to adopt.
- Involved in developing e2e Automation scenarios for unit testcases with clean coding concepts using junit5 framework
- Maintaining the test execution status on Concourse pipeline
- Identifying bugs and raising bugs
- Guiding and Training the QA Enablement team contributing to WIN WIN culture

## □ Project 2 : Synopsis for IBM Cloud Pak® for Watson AIOps :

- IBM Cloud Pak® for Watson AIOps is an AIOps platform that deploys advanced, explainable AI across the IT Operations (ITOps) toolchain so that you can confidently assess, diagnose, andresolve incidents across mission-critical workloads.
- Built on IBM Automation foundation, IBM Cloud Pak for Watson AIOps eases the path to adopting advanced AI for ITOps to decrease your operational costs. With this Cloud Pak, you can increase your customer satisfaction by proactively avoiding incidents and accelerating your time to resolution.
- The scale of IT systems and their complexity is continually increasing over the last few years because of digital transformation, containerization, and hybrid cloud adoption. IT teams are being inundated with routine maintenance activities and expanding cloud services, leaving them little or no time to contribute toward innovation. To accelerate business automation, reduce complexity, save costs, and automate regular tasks, companies must use the power of AI.
- IBM Cloud Pak for Watson AIOps powers automation by using diverse data sets from an entirerange of hybrid environments from cloud to on-premises, and bringing the information together across ITOps. With this Cloud Pak, you can tap into shared automation services to get insight into how your processes run.
- You can also visualize hotspots and bottlenecks, and pinpoint what to fix with event detection to prioritize which issues to address first.

**Tools and technology used:** IBM Internal Tools, Openshift, Docker, Kubernetes, Java, Python, PyCharm, Debain/Ubuntu, AWS, Jenkins, Behave, Cucumber/Gherkins Method, Selenium Webdriver, Page Object Repositories, Rest Assured API testing automation, Rancher, Openstack, ServiceNow, VMWare NSx, Zabbix.

## My specific role/contribution in/to the project:

#### **Automation Testing:**

- Involved in developing Automation scenarios for different Observers that connects to and observes opens source Cloud computing Infrastructure like Rancher, Openstack, ServiceNow, VMWare NSx, Zabbix from Integration Verification Test perspective.
- UI automation to which is part sanity ie Build Verification.
- Setting up and Maintaing the Cloud Target system for Automation.
- Raise Automation Bugs.
- API Automation using Python libraries.
- Guiding and Training the QA team contributing to WIN WIN culture

Project #2: IPI

**August 2019 – March 2021** 

• Client: Neustar, Inc.

• Role: Software Test Engineer

• Project Synopsis:

IPI® gives you the geographic location and network data for any Internet Protocol (IP) address in the public address space.

The information includes:

- ♣ Postal code, city, state, region, country, and continent
- ♣ Area code (US and Canada only) and time zone
- ♣ Longitude and latitude
- ♣ DMA (Designated Market Area) and MSA (Metropolitan Statistical Area)
- ♣ Network information, including type, speed, carrier, and registering organization

You can then integrate the data into the web applications on your site, for localizing content, targeting your marketing message, complying with local regulations, and preventing fraud.

You can retrieve IPI's IP network and location data in two ways, from our:

- ♣ Hosted service, over the Internet
- ♣ GeoDirectory® Server (GDS), installed locally at your site.

**Tools and technology used:**Neustar Internal Tools, Docker, Kubernetes, Java, Python, PyCharm, Debain/Ubuntu, AWS, Jenkins, Bamboo, Jira, Jmeter, Cucumber/Gherkins Method, Selenium Webdriver, Page Object Repositories

## My specific role/contribution in/to the project:

## **Module Testing:**

- Involved in designing Test Statergy, Test Plan
- Involved in Functional testing and performance benchmarking of Dockerised GDS which are hosted on the customer site
- Manual UI testing for the inhouse Label Mapper Tool, Customer Portal Report, GDS etc
- Automation of the IPI Tools with Cucumber and Selenium Webdriver Framework
- Guiding and Training the QA team contributing to WIN WIN culture

Monisha S K Software Engineer - Testing monisha.9092@gmail.com +91-9448469209 Project #3: SDP

**August 2017 – July 2019** 

Client: Cisco Systems, Inc.Role :Software Test Engineer

• Project Synopsis:

The Cisco Services Delivery Platform (SDP) is a secure, modular, highly scalable, distributed application development platform with advanced data ingestion, exposition, processing, machine learning, artificial intelligence, workflow integration, and cataloging operations.

SDP integrates streaming (data in-motion) and batch (data at-rest) data from multiple sources, plus human, and machine generated intellectual capital, to deliver scalable analytics applications.

SDP core components are Dockerized and deployed as Docker Containers in a highly scalable, manageable, highly available Kubernetes cluster. The deployment of the components is automated.

**Tools and technology used:**Cisco Internal Tools, MapR Hadoop distribution, Spark, Kafka, Hdfs, Hbase, ML Scikit, Docker, Kubernetes, Java, Scala, Python, YAML, Drone, PyCharm, Debain/Ubuntu, AWS, Jupyter.

## My specific role/contribution in/to the project:

## **Module Testing:**

- Involved in bigdata Hadoop testing especially the Batch Workflow testing via Connectors where either data is Inbound to SDP (Hbase/HDFS datastore)platform or Outbound to SDP
- Involved in Microservices, ML Scikit and Python App Component Testing
- Involved in testing Streaming Data either Inbound or Outbound SDP
- Involved in Hybrid Workflow testing (where Batch data or stream data is pushed/pulled to SDP through bridge connectors)
- Owned the Integration testing of Third Party tool Jupyter(IDE for Data Scientist) with SDP which is deployed as Kubernetes pod
- Developing the Application through Python to test various Customer Scenarios
- Identify and test many customer specific real time scenarios which adds value to the Product

# **Performance Testing:**

- Involved in Performance testing for Nifi Batch connectors, Stream connectors like RabbitMQ/MMQT/ActiveMQ to Kafka and viceversa
- Developed a Python script to generate 100's of GB of data for Nifi Batch Connector Performance testing and Shell script for Performance monitoring
- Owned the Performance testing of ML Scikit component for benchmarking the Cluster Resource
- Involved in Longetivity test for the SDP module(Have written Jmeterscripts, execution and Reporting)

## **Devops:**

- Bringing up the AWS VM using the Pre-defined templates through various tools like terraform, aws client etc to install many open source tool (Splunk, Elastic Search, RabbitMQ/MMQT/ActiveMQ, SFTP, jdbc etc) which is dependency for the QA team to start their component testing.
- Developed own Python-K8s Environment Sanity Framework(Cluster Verification Tool) using Python Language which ensures
  - o The K8s Environment provisioned for QA has all the SDP Components which are deployed as Services in the K8s as pods are up and Running
  - o Inter communication between various SDP Component's pod exist
  - Various Service end points are reacheable, PVC and secrets are configured, prerequired files are present.
  - o DB(postgress) is up and is connected
  - o Reports are generated and broadcasted to the team

#### **Automation:**

- Initial POC for API Automation through Rest Assured Framework to finalise Automation framework
- Contributed in the API Automation framework Development
- Contributed in the API Automation for various SDP Components

Innovations and Knowledge Transfer to the team which inturn helps team to speed up with the current technology being used in the project and understand their scope and process of testing the product:

- Initial POC with Dockers, K8s(developed my own application using Python which demonstrates the advantages of Dockers and K8s), many open source Big data Tools like Apacke Hadoop, Splunk, Elastic Search, Kafka, Message streaming Tools(MMQT, RabbitMQ etc) and Provide KT to the team which helps the team to kick start the Product Testing to meet the Release deadline
- Developing Python and Shell Scripts to generate Performance test data
- Initial POC to decide the Api Automation Framework

Professional Training to Team with the current technology and Languages: Python and Dockers & K8s

Project #4: SRAN17	December 2016 – March 2017
Transport Feature	
Testing in Enodeb	
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Client: NokiaRole: Software Test Engineer

• Project Synopsis:

## Worked on the feature → WCDMA effective transport small IP packet

**Feature Description:** The feature extends the routing decision for egress IP packets to take also the source address of IP packets into account. Target radio technology is LTE (FDD and TDD) as well as SRAN.

The feature can be used with and without VLAN IDs on the Ethernet links to which the BTS is connected. TOP Frequency Resilience and WCDMA small IP packet multiplexing are two dependent features.

**Tools and technology used:** Wireshark, Putty, Winsep , IXIA., Xshell, Robot Framework with Python scripting Language

Protocols: Samba, CIFS, FTP, TCP, UDP, IPSEC

## My specific role/contribution in/to the project:

- WCDMA effective transport small IP packet, where 2 members were involved
- Preparing Test strategy and Use case preparation.
- Tested the Device board for feature functionality with manual and automation using Robot Automation framework and python.

- Configuring the hardware Device under test located in Nokia Labs for WCDMA feature
  execution functionality through JSON file, through both manual process and through
  Automation using Robot Automation framework and python.
- Tested the feature using TCP, UDP, IPSEC protocol
- Standalone and end to end feature testing
- Debugging issues and raising bugs on Jira as per Test case execution.

Project #5: Asset Flow Content Management System Jan 2015 – Dec 2016

- Client: Media Companies like Videotron, Disney, Sony, Direct TV, Cox etc.
- Role : Software Test Engineer
- Project Synopsis:

Asset Flow Content Management System - Testing

SeaChange- AssetFlow Content Management System, or AssetFlow system, is one of many types of content (asset) management systems. It is an enterprise-wide, end-to-end system designed to manage the delivery and ingest of assets for on-demand business needs through the asset distribution interface (ADI) specification. By transforming and distributing assets to multiple sites based on user-defined rules and workflows, the AssetFlow system can deliver all types of assets to any subscriber platform—PC, TV or mobile. In addition, with a user-friendly, GUI-based workflow interface, it allows operators to efficiently manage and deliver content from integrated drop boxes to their subscriber base.

**Tools and technology used:** Eclipse, Selenium IDE, Selenium Web driver, AutoIT, SqlYog, JIRA, Bugzilla, Testlink, Samba, CIFS, FTP, Putty, Winsep, VMsphere Client

## My specific role/contribution in/to the project:

- Hands on experience in both Manual and Automation testing
- Involved in the Development of a Keyword Driven automation frameworkusing Selenium and java
- Written more than 300 Automation test scenarios and executed on Web application
- Involved in frame work enhancement using java (OOPS) concept
- Executed Performance testing through Automation by loading it with large amount of data on web application
- Automated Regression suite test cases
- Have written Python script to generate large amount of test data for Performance testing.

- Worked under demanding deadlines on projects for definite timeline.
- Sanity testing, Regression testing, Features testing, Fix verification
- Handling Critical bugs and preparing the test artifacts.
- Testing and raising critical defects occurring in Production by having wide coverage of test scenarios close to the customer site.
- Log analysis and identification of root cause of failures and reporting the same to developers via Bugzilla. Follow-up of same and re-test
- Hands on working with Third Party Tools like Envivio, Mediainfo, Cerify, Promedia, Marking Tools which are widely used in the Project
- Key role in Installing (CentOS) and Upgrading Project machine's and Preparing appropriate Test Environment on LINUXPlatform using VMsphere Client
- Written a Bash Shell script to automate installation of various simulators like required Content Processing Tools and the TTV Site, for effective Testing in Customer like environment, every release, on the LINUXPlatform
- Written Python Script to generate 1000's of .xml files with necessary changes for effective Performance Testing in Customer like environment on LINUXPlatform
- Have involved in Bug Clearance Activity and resolving the non-reproducible bugs on Jira.
- Managing the Test cases using Test Case management Tool like Test link Tool
- Experience in Implementing Functional (Selenium), Project Management(JIRA)
   Tools
- Writing XPath used for Selenium Automation and automated test cases to reduce my Manual testing effort using Selenium
- Provided guidance and trainings to the peers and junior members of the team.