Phone: +91 9972910271 Email: cshekar.madhu@gmail.com

# **Professional Summary**

Overall **10+ years** of Experience in Software Development, Automation and Manual Testing using various Methodologies

- Python, Pyramid, Django, Jinja Template Engine, Flask, Bottle, mod\_wsgi, Apache 2.4, Mongodb, Sqlite3, ORM(SQLAlchemy), MQTT (Message Queuing Telemetry Transport) messaging Protocol, PostgreSQL, unittest, REST based API, Tensorflow, Cherrypy, Paramiko
- Experience in continuous integration deployment using Jenkins
- Video Streaming using Raspberry Pi 3, OpenCV with python and Flask Frame work
- Text Detection and Object Recognition techniques using Tensorflow
- Integration of Plum device with Python Flask using sparkplug MQTT python Library
- Experience in project environment set up which includes bug management tool (Jira), Test case management tool (Test Link), Continuous integration tool (Jenkins)
- Hands on experience in automation scripting using Selenium1.0 and 2.0 (Ruby and Java) using
   Cucumber
- Automation experience on Robot framework using autoitlibrary
- Worked on Bash (Shell) scripting to generate build images.
- Experienced in automating **CLI** commands, **T**-commands
- Well acquainted with Software Development Life Cycle (SDLC) and Software Testing Life Cycle (STLC).
- Performed Smoke Testing, Integration Testing, System Testing, Regression Testing and Compatibility Testing.
- Reviewed test cases for peers and given valuable comments about test case coverage and functionality.
- Experience in manual testing of Handheld mobile devices.

# **Experience summary**

- Working as Lead Consultant at ITC INFOTECH LTD, Bangalore from December 7<sup>th</sup>, 2016 to Till
   Date
- Worked as a Specialist with TATA ELXSI, Bangalore from September 2015 to 9th August 2016
- Worked as a Technical Lead for HCL, Bangalore from September 2010 to August 2015
- Worked as Product Engineer for Symphony Services Corp. (India) Pvt. Ltd., Bangalore since Feb' 2009 to May 2010

# **Education**

- MCA from Bullaya College, Visakhapatnam with 67% marks in 1997
- B.Sc. (Computers) from MPR College, Visakhapatnam with 65.5% marks in 1994.
- Inter from BVK College, Visakhapatnam with 62.2% marks in 1991.

• 10th from KV, Bacheli with 61% marks in 1989

## **Technical Skills**

Operating System : Windows 95/98/NT/2K, Red Hat- Linux

Languages : C, C++, Java, COBOL, VB.Net, Python

Database : MYSQL, Sqlite3, SQLAlchemy, PostgreSQL

VB Script, JavaScript, Ruby, Python, Shell

Scripting Languages : (bash, sh)

QTP-UFT 11.50, Selenium and Silktest, Robot

Testing Tools : framework

Test Mngt Tool : HP Quality Center, TestLink, Jira

Configuration Management Tool : SVN, CVS and Clear Case

# **Onsite Travel/Experience**

Visited customers site for Transition Holding US B1 Visa (ME)

United States – Webster NY(XEROX)

# **Project Details**

#### Project1

Project Name	SIS
Client	Columbia University
Technology	Python, Django, Kafka, Authentication (Kerberos via CAS, OAuth 2.0, Authorization (LDAP/CAS/Shibboleth/OAuth 2.0)
Position	Lead Consultant
Duration	Jan'19 to Till Date

SIS: Student information system at Columbia University is the system of record for student data regarding admissions, financial aid, registration, transcripts, billing, and housing functions for all schools and offices at the University.

SSOL: Student Services Online, or SSOL for short, is the University's web-based, multi-purpose tool for accepted students. web interface for SIS - supports student, faculty, alumni and administrative access to SIS data. Used for following functionalities.

- check your registration appointment times,
- register for your courses,
- view your bill,

- update your address, and
- check for holds that may be blocking your registration.

## **Responsibilities:**

- Backend Design using Python Django Web Framework from scratch
- AngularJS Integration with Django
- Database modelling using MySQL

### Project2:

Project Name	Asset Advisor
Client	Keysight Technologies
Technology	Python, Flask, Flask-Security, Pysolar, Nginx, ReactJS, psycopg2, unittest
Position	Lead Consultant
Duration	Jan'18 to Jan' 19

Keysight is one of the world's leading electronic measurement company, transforming today's measurement experience through innovations in wireless, modular, and software solutions.

Asset advisor is a real time Asset management + Advisory product which offers real time Asset tracking, Asset health monitoring, Asset utilization, loan management and custom alert and notification in multitenancy environment.

#### **Responsibilities:**

- Backend Design using Python Flask Web Framework from scratch
- ReactJS Integration with Flask
- Sparkplug MQTT integration with python
- Database modelling used Postgres
- Performed unittesting

## Project3:

Project Name	Smart Invoice Processing
Client	ITC Limited
Technology	Python , Django, TensorFlow, Microsoft Azure, REST API, unittest
Position	Lead Consultant
Duration	Jun'17 to Dec'17

It is a web application which connects to Microsoft Azure Blob, where the attachments are extracted and its relevant details are processed using Text Detection, Object Recognition techniques to obtain relevant

details. These are then populated into specified JSON format and uploaded to the Azure Queue. Which is then processed accordingly by 3rd party applications.

## **Responsibilities:**

- Created Django REST API modules for integration Tensorflow Deep Learning modules.
- Created own API's for executing the test scenarios.
- Worked along with AI team and 3rd Party application team in getting them to mutual understanding and developing components which resolved integration issues in an optimal manner.
- Co-ordinated with onsite team in understanding client requirements and guiding the offshore team.
- Able to work along teams with diverse technologies and guide them to a well knitted technical solution.

## Project4:

Project Name	Ford Direct
Client	Ford, US
Technology	Python, Pyramid Frame Work, , Newrelic API to REST API calls, Nginx,
	CentOS, Mongodb, unittest
	, ,
Position	Lead Consultant

Ford Direct is a web-based project, majorly there are two units in this framework one is Admin Maintenance Tool (AMT) and Dealer Maintenance Tool (DMT), In AMT we have all admin right privileges, where in DMT all new enrollments will be happened in form of XML.

### Responsibilities:

- Feature enhancement and bug fixes
- Involved in code reviews
- Logging into Jira for more info on Tickets
- Weekly calls with clients to update on tickets

### Project5:

Project Name	Lifeline Vi IP with DMP(IOT)
Client	Tunstall Limited, Uk
Technology	Python, Flask, Bottle Frame, Sqlite3, Apache, JSON, MOD_WSGI,
	shell(bash.sh), Pycharm, Git Hub

Position	Specialist
Duration	Sep'15 to Apr'16

The Lifeline VI IP product shall be a new Telecare product from Tunstall, offering the user with connectivity options of GSM, GPRS, 3G and Ethernet Broadband connections to report alarms/events to ARC and seek necessary help.

The integrated system of LL VI IP, DMP & ARC shall provide:

- Ongoing monitoring of LL Vi IP status by DMP
- Software and configuration updates of LL Vi IP by DMP
- ·Alarm calls and background calls to Tunstall ARC via data and voice channels of Ethernet, WIFI, GSM, GPRS and UMTS.
- •of Receive triggers/events from Tunstall RF Sensors (including Pendant) and Device buttons to raise alarm calls to Tunstall ARC (PNC)
- ·Use DTMF and Tunstall's STMF for in-band communication of alarms in TT92 ST, TT21 ST and BS8521 Protocols over GSM phone call with PNC
- -Use Ethernet, 3G and GPRS interface for IP connectivity, to register with Asterisk SIP Servers and avail VoIP/SIP/IP services
- ·Make Voice Over IP (VoIP) Calls using SIP protocol to Tunstall ARC
- ·Receive Voice Over IP (VoIP) Calls using SIP protocol from Tunstall ARC
- ·Exchange alarm information using SCAIP with ARC over SIP
- ·Exchange alarm information using IPACS with ARC over UDP

DMP is web-based application which is deployed on Cloud. Software Updates via DMP

#### Responsibilities:

- Development of Backend Server Side & Client Side using Python, Bottle frame work
- Involved in code reviews

#### Project6:

Project Name	eCFD(Enterprise Computational Fluid Dynamics )
Client	ECFD, Boeing
Technology	Python, Bottle Frame work, Mongodb, Apache, JSON, MOD_WSGI, REST
	API, Pycharm, Git Hub
Position	API, Pycharm, Git Hub  Technical Lead

eCFD is a web application. The plan is created and submitted to Boieng solvers which reside at HPC servers. The communication between Application and HCP server is done via Python service. The database used is Mongodb.

- •Significant reduction is wind tunnel usage and expenses
- Spectacular improvement in the designs
- •Industry best methods were used to test the flight, which minimized the risk of finding aerodynamic shortfalls in flight area.
- •Reduction in cost and schedule impact

## Responsibilities:

- Development of backend server using Python
- Involved in code reviews

### Project7:

Project Name	Audio Gateway (AG)
Client	s1nn, Germany
Position	Developer
Environment	C , CAN, S1PP, CDEF, BAP Protocols, Python
Duration	Sep'10 - Dec'11

AG is a device for connecting Apple iPod and Mass Storage Devices. The AG is interfaced to the ZAB (in-car entertainment system's head unit/ Automotive Infotainment). When Apple iPod or MSD device is plugged in, the AG provides features like content browsing/selection and playback control from the selected device (iPod or MSD device).

Implementing Audio player functionality to Play, Stop, Pause, Forward, Backward, Scan and Shuffle the MP3, MP4, WMA, AAC-LC, Ogg Vorbis audio files stored in MSD

### Responsibilities:

- Involved in coding some of the features of simulator and writing script to FF, FB, Pause, Play and resume
- Involved in code reviews
- Performed unittest

### Project8:

Project Name	MediStream
Client	Rivulet Communication, US
Position	Senior Product Engineer
Duration	Feb'09-May'10
Tools	J2EE, Java, Spring, FFMEPG 0.5, MP4Box, List_CDdrives, DVD-Author,
	LibVisca1.0.1, SAN, NFS, PACS, EMR(Electronic Medical
	Record)/RIS(Radiology Information System), Apache, Tomcat, Ldap

The MediStream Video Application Solution provides the full functionality that many customers in the medical market are seeking in very integrated and compact solutions. Rivulet offers a complete managed solution that integrates local OR (operation) storage, centralized network storage / storage area network (SAN), and video streaming to local or remote viewers. The complete solution can be managed locally within the OR (operation) via a touch panel (TP) or PC interface, or remotely from a control room.

#### Responsibilities:

• Involved in code reviews		Involved in Server Side Programming (Servlets and JDBC) Involved in code reviews
	•	involved in code reviews