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

Professional Summary

Overall **15+ years** of IT Experience in Software Development, Automation and Manual Testing. Having **6+ years** of experience in **Python Development**

- Python(collections, Data Structures: lists, dict, tuples, sets, strings), Pyramid, Django, Flask, Bottle, mod_wsgi, Apache 2.4, Mongodb, Sqlite3, ORM(SQLAlchemy), Jinja Template Engine, 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 Framework
- Text Detection and Object Recognition techniques using Tensorflow (Deep Learning)
- Experience in AWS (EC2, S3 and RDS)
- Integration of Plum device with Python Flask using sparkplug MQTT python Library
- Redis Queue for handling asynchronous tasks
- Experience in project environment set up which includes bug management tool (**Jira**), Test case management tool (**Test Link**), Continuous integration tool (**Jenkins**)

Experience summary

- Working as Lead Consultant at ITC INFOTECH LTD, Bangalore from December 7th, 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
- Worked as Senior Software Engineer at Aricent Technologies Pvt. Ltd., Bangalore since April 2004 to August 2008
- Worked as Software Engineer at Jataayu Software Pvt. Ltd., Bangalore since Jan' 2003 to Oct' 2003

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- LinuxLanguages: C, C++, Java, COBOL, VB.Net, PythonDatabase: MYSQL, Sqlite3, PostgreSQL, Mongo

VB Script, JavaScript, Ruby, Python,

Scripting Languages : Shell(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:

Asset Advisor
Keysight Technologies
Python, Flask, Flask-Security, Pysolar, Redis, Nginx, ReactJS, psycopg2,
unittest
Lead Consultant
Jan'19 to Till Date

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

Project2:

Project Name	Smart Invoice Processing
Client	ITC Limited
Technology	Python, Django, TensorFlow, Microsoft Azure, REST API, unittest
Position	Lead Consultant
Duration	Jan'18 to Jan' 19

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 framework
- Involved in code reviews

Project6:

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

eCFD is an web application. The plan are 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 Server-Side Programming (Servlets and JDBC)
- Involved in code reviews