



Phone: +91 9972910271

Email: cshekar.madhu@gmail.com

## Professional Summary

Overall **15+ years** of Experience in **Software Development, Automation Testing** using various Methodologies. Having **6+ years** of experience in **Python Development**. Having **3+ years'** experience as a **Scrum Master**

- **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, React(Redux), Webpack, REST based API, Tensorflow, CherryPy, Paramiko, Redis, Heroku**
- I am **Professional Scrum Master practitioner** from Scrum.org (Verification link <https://www.scrum.org/certificates/482056>, email-id will be provided on request) and Proficient in **TDD**
- Experience in continuous integration deployment using Jenkins
- Worked on reporting tool **Tableau** for building SQL query's using Python Scripting
- Video **Streaming** using **Raspberry Pi 3, OpenCV with python and Flask Framework**
- 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**.

## 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 9<sup>th</sup> 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.
- 10<sup>th</sup> from KV, Bacheli with 61% marks in 1989

## Technical Skills

<b>Operating System</b>	: Windows 95/98/NT/2K, Z/OS, Red Hat- Linux
<b>Languages</b>	: C, C++, Java, COBOL, VB.Net, Python
<b>Database</b>	: MYSQL, Sqlite3, SQLAlchemy, PostgreSQL VB Script, JavaScript, Ruby, Python/Flask/Django/Bottle/Pyramid
<b>Scripting Languages</b>	: Shell(bash, sh) QTP-UFT 11.50, Selenium and Silktest, Robot
<b>Testing Tools</b>	: framework
<b>Test Mngt Tool</b>	: HP Quality Center, Jira, Confluence, TestLink
<b>Configuration Management Tool</b>	: SVN, CVS and Clear Case

## Onsite Travel/Experience

Visited customers site for Transition Holding **US B1 Visa (ME) - Valid Up 2029**

- United States – Webster NY(XEROX)

## Project Details

### Project1:

<b>Project Name</b>	SIS
<b>Client</b>	<b>Columbia University</b>
<b>Technology</b>	<b>Python, Django, Authentication (Kerberos via CAS, OAuth 2.0, Authorization (LDAP/CAS/Shibboleth/OAuth 2.0), Messaging - Kafka &amp; Confluent, Domain Driven Design (Microservices), JavaScript/AngularJS - Web Services, Docker Containers</b>
<b>Position</b>	Full Stack Developer
<b>Duration</b>	Sep'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 Redux implementations
- Database modelling using MySQL
- REST API Creations

**Project2:**

<b>Project Name</b>	Asset Advisor
<b>Client</b>	Keysight Technologies
<b>Technology</b>	<b>Python, Django, Gunicorn, Nginx, React (Redux), Webpack, psycopg2,</b>
<b>Role</b>	Full Stack Developer
<b>Domain</b>	Manufacturing
<b>Duration</b>	July'17 to Aug'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 Django Web Framework from scratch
- REST API creation
- Database modelling used Postgres
- Feature enhancements and Bug fixes in Frontend

**Project3:**

<b>Project Name</b>	TAP
<b>Client</b>	Inhouse Project
<b>Technology</b>	<b>Python, OpenCV, Flask Web Framework, Raspberry Pi 3</b>

<b>Role</b>	Developer
<b>Domain</b>	Video Streaming
<b>Duration</b>	Jan'17 to Jun'17

Live Video Streaming using Raspberry Pi board and used OpenCV module for marking the videos. Marking the Entry inside main gate in **Green** and Exit from main gate in **Red** and It should be streamed on Web

**Responsibilities:**

- Involved in developing algorithms
- Developed Webservice to stream on WEB

**Project4:**

<b>Project Name</b>	PCX PES Nike Footwear
<b>Client</b>	<b>Nike</b>
<b>Technology</b>	<b>HttpClient, Java, REST Api, Cucumber, Selenium, Confluence</b>
<b>Role</b>	Automation
<b>Domain</b>	PLM
<b>Duration</b>	Jan'15 to Nov'15

Automation Flex-PLM tool. Like BOL, BOM automation.

**Responsibilities:**

- Daily status meeting giving sprint updates in scrum call.
- Design/ Creation of new scripts using java, selenium and cucumber
- Task Creation in Version one tool and updating of status of the particular task

**Project5:**

<b>Project Name</b>	Smart Invoice Processing
<b>Client</b>	ITC Limited
<b>Technology</b>	<b>Python, Django, TensorFlow, Microsoft Azure, REST API</b>
<b>Role</b>	Developer
<b>Duration</b>	Jan'14 to Dec'14

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.

#### **Project6:**

<b>Project Name</b>	Ford Direct
<b>Client</b>	Ford, US
<b>Technology</b>	<b>Python, Pyramid Framework, Newrelic API to REST API calls, Nginx, CentOS, Mongoddb, unittest</b>
<b>Domain</b>	Digital Transmission
<b>Role</b>	Developer
<b>Duration</b>	May'12 to Dec '13

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

#### **Project7:**

<b>Project Name</b>	Lifeline Vi IP with DMP(IOT)
<b>Client</b>	Tunstall Limited, Uk
<b>Technology</b>	<b>Python, Flask, Bottle Frame, Sqlite3, Apache, JSON, MOD_WSGI, shell(bash.sh), Pycharm, Git Hub</b>
<b>Role</b>	Developer
<b>Domain</b>	Healthcare
<b>Duration</b>	Sep'11 to Apr'12

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

#### **Project8:**

<b>Project Name</b>	eCFD(Enterprise Computational Fluid Dynamics )
<b>Client</b>	ECFD, Boeing
<b>Technology</b>	<b>Python, Bottle Framework, Mongoddb, Apache, JSON, MOD_WSGI, REST API, Pycharm, Git Hub</b>
<b>Role</b>	Developer
<b>Duration</b>	Jan'11 to Aug' 11

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 Mongoddb.

- Significant reduction in 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

**Project9:**

<b>Project Name</b>	Audio Gateway (AG)
<b>Client</b>	s1nn, Germany
<b>Role</b>	Developer
<b>Environment</b>	<b>C, CAN, S1PP, CDEF, BAP Protocols, Python</b>
<b>Domain</b>	Automotive Infotainment
<b>Duration</b>	Jun'09 - Dec'10

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

**Project10:**

<b>Project Name</b>	MediStream
<b>Client</b>	Rivulet Communication, US
<b>Role</b>	Senior Product Engineer
<b>Duration</b>	Feb'08-May'09
<b>Tools</b>	<b>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</b>

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