**DH**

**Python Developer**

**PROFESSIONAL SUMMARY:**

* **6+ years** of experience with multiple technologies primarily **Python** and **shell scripting.**
* Designed tools using python and web services like **Flask**.
* Experience in object oriented programming (OOP) concepts using python and Linux.
* Knowledge on **Django**, a high-level Python Web framework.
* Experience in automation deployment systems like **Ansible**.
* Well acquainted with Software development life cycle (**SDLC**).
* Experience developing with database servers like **MySQL**.
* Exposure working with virtual machines and containers with **Vagrant**, **Virtual** **Box** and **Docker**.
* Experience with Unit testing/ **Test-driven Development (TDD)** with **PyUnit**, **PyTest** modules.
* Experience in executing Field Test Plan for Full, Regression and Sanity test scenarios.
* Experience in **Automation** working on python scripting for Log Analysis Specific tools.
* Experience with Design, code and debug operations utilizing python.
* Exposure to wireless technologies like **CDMA, LTE, VOLTE, SRLTE, CSFB** on mobile devices.
* Exposure to Wireless and Telecommunication Protocols and testing tools like QXDM, APEX, LAF, KPI-ATS, QMI.
* **SQL** exposure with experience in **DDL** and **DML** commands.
* Experience in working with various Python IDE’s using **PyCharm, PyScripter, PyDev**
* Fixing code bugs and reverting the code changes in production, setup data load and scripts automated build process.
* Experience in configuration management using **GIT**, **GitHub** and **Perforce** for peer review.
* Highly motivated, dedicated, quick learner and have proven ability to work individually and as a team.

**TECHNICAL SKILLS:**

Languages: Python 2.7, C, Shell script

DB: MySQL, SQLite

Web Technologies: Python requests library, Python Flask, Docker, JSON

OS: Windows, Linux, Oracle’s Virtual Box

Development Tool(IDE): Eclipse, PyCharm

Testing Tools: QXDM, QPST, PDC, QMI, KPI\_ATS, LAF, APEX

RF Technologies**:** GSM, CDMA, WCDMA, 4G LTE, MIMO, OFDMA, SC-FDMA

**EDUCATION:**

**Master of Science in VLSI & Embedded Systems**

Jawaharlal Nehru Technological University, Hyderabad, India

**PROFESSIONAL EXPERIENCE:**

**Qualcomm Inc.**

**Location: San Diego, CA**

**Python Engineer May 2016-Present**

Developing scripts for python based automation tool that triggers a set of scripts based on user supplied analysis configuration file that automates end-to-end log analysis

**Responsibilities:**

* Developed scenarios which are grouped as sub-systems for analysis and parsing of the mobile communication events and messages in an order to validate against the expected call flow to check for any failure.
* Developed a WRAPPER module which is a collection of python scripts that is triggered by user-defined keywords that represent separate test area and generates reports.
* Worked on LAF, a **python based framework** that automates end-to-end log analysis. Developed scenarios that parses a series of metrics to determine the call flow success or failure and print the causes and reasons in a. laf file format
* Modified existing scenario codes to suit the changing industry standards for mobile communication metrics
* Worked on the **SQLite** **DB** which is the backend for the automation tool
* Wrote python scripts to automate mundane jobs like renaming hundreds of logs after tester collects them, working with excel, xml sheets to copy the data in a specific order/format.
* Worked extensively on python’s Pattern matching, regular expressions
* Developed python scripts using **plotly** to create plots and graphs for consumer demonstration
* Worked on modules like **argparse, os, gc, multiprocessing, datetime**
* Worked on automation python scripts for parsing ISF files and Exposure to sql commands as part of extracting key performance indicators from the ISF logs
* Developed a wrapper module which reads a config file, copies the files from server to local machine, unzips the logs and creates an analysis config based on **JSON** file and submit the processing jobs to the log parsing tool
* Responsible for maintaining the crowd sourced scripts within a structure for Nightly Validations occurring before every official release
* Exposure to Qualcomm **CreatePoint**, **Perforce**, Jira

**Tools used: Python, KPI-ATS, LAF, APEX, Perforce, SQLite, JSON**

**Dylitics**

**Location: San Mateo, CA**

**Python Developer Mar 2014–Feb 2016**

Developed a python application to automate and maintain up-to-date inventory for IT infrastructure reducing manual turmoil and human errors. Primary responsibilities include developing, implementing and maintaining customized automation infrastructure.

**Responsibilities:**

* Inherited code and rewrote code using advanced features like python **exceptions**, **generators**.
* Developed python scripts to parse data using **Pandas** **Data** **frame** and load into **JSON** format.
* Wrote **SQL** queries to define data structures and extract data into **python** **data** **frames**.
* Implemented continuous monitoring via **watchdog** **library** for user file system and trigger the application in case of any event.
* Setting up email scripts using **smtplib** to indicate the development activity and for notifying on any assistance deprived behavior.
* Utilized continuous integration and automated deployments with **Jenkins**, **Ansible** for automated build and code coverage reports.
* Experienced with deploying the application image on Docker.
* Deployed Flask Application with **nginx** and **gunicorn** on **AWS EC2** cloud VM.

**Tools used: Python 2.7, Jenkins, Linux, JSON, Pandas Data frame, Docker, GitHub, SQL**

**KDS France Inc.**

**Location: Pune, India**

**Software Engineer Jan 2013 – Jan 2014**

**Travel and Expense management system**

* Developed scripts for pattern matching in Perl for parsing required fields from databases (large excel reports, xml files).
* Developed scripts to format data in a specified order for huge data input directories by traversing through the file systems tree
* Responsible for installing, troubleshoot and support operating systems, applications, network connections and wireless networks
* Used multithreading and synchronization techniques to file multiple requests.
* Worked on a web-based data retrieval project using PERL to retrieve and format data residing on remote servers
* Good understanding network OSI Model, TCP/IP protocol suite (IP, TCP, UDP, SMTP, FTP, TFTP)

**Tools used: Perl, REST API, JavaScript, Vmware, PERL, XML**

**Defence Electronics Research Laboratory**

**Location: Hyderabad, India**

**Technical member of the Team Nov 2011 – Dec 2012**

**Responsibilities:**

* Wrote and executed various MySQL database queries from python using **Python**-**MySQL** connector and **MySQLdb** package.
* Used python modules for data analytics and computations with **NumPy**, **SciPy**.
* Used urllib2 and requests library to scrape data in JSON format and processing it using Python library (json) for extracting the data.
* Worked on python **requests** module and HTTP requests, response, headers.
* Developed PyUnit test scripts for testing the code for increasing efficiency.
* Developed automation tasks using Python, Shell Scripting, XML to automate some of the tasks.

**Tools used: Python 2.7, Requests Library, MySQLdb , JSON, Linux.**

**National Remote Sensing Center**

**Location: Hyderabad, India**

**Intern Dec 2010 -May 2011**

* Created display interface for Test Pattern Generator (TPG) using MicroBlaze Processor embedded on a Xilinx Virtex-5 FPGA.
* Proposed display interface is designed on an **FPGA** by adding external interfaces like GPIO, timer, EEPROM.
* Developed hardware using EDA (Electronic Design Automation) in **Xilinx Platform Studio**.
* Hardware is launched into the Software Development Kit and programmed.

**Tools used: Xilinx, MATLAB**