**SUMMARY:**

* Seeking a **Python Developer** position in the IT industrythat will leverage my Technical Skills (Python Expertise) to support organizations in successfully leading their strategic initiatives
* **7 Years** of thriving IT experience in Python Development and Scripting on UNIX/Linux and Windows platforms
* Have worked primarily in the domain of Internet of Things, Automation, Automotive and e-commerce
* Professional experience in designing, development, testing, deployment and support of applications programmed in Python, Django, Flask, MySQL, PostgreSQL, Apache, Nginx, Gunicorn
* Expertise in building full stack web applications using Python programming and web frameworks
* Excellent in writing customized Python scripts for automation, data parsing, database operations, data extraction, text manipulation, files parsing and reports generation
* Good hands on experience with Relational databases MySQL, PostgreSQL, SQL and knowledge on EAV and Time-series database
* Expertise in data scraping and web crawling techniques
* Expertise in designing and developing complete IOT and automation cloud solutions
* Good hands on experience in performing data analytics and applying machine learning algorithms using NLP, OpenCV, Scikit, Scipy
* Experienced in version control systems CVS, Bazaar, SVN and Git
* Experienced in Automation using Python, specifically automating unit/manual test cases
* Good hands on experience in building user interface using HTML, JavaScript, CSS, jQuery, AJAX, Bootstrap
* Great ability to write clear, maintainable and efficient codebase by following PEP8 standards
* Proficiency working in a Unix/Linux environment; have good Unix shell scripting skills
* Knowledge of DevOps work
* Expertise in building RESTful web services
* Good hands on experience in Amazon EC2 and IBM Bluemix cloud deployment and cloud services
* Expertise in TCP/IP socket programming and building solutions using MQTT protocol
* Managed a team being senior resource and involved in activities customer engagement, requirements gathering, efforts estimations, sprint planning, design, development, guidance to team members, project deliverables, project management
* Quick at identifying errors and debugging code, doing bug fixes and enhancements to legacy code
* Self-starter, self-motivated with excellent communication, interpersonal and facilitation skills
* Ability to multi-task and work against deadlines/priorities, possess a sense of ownership and desire to take on an expanded role over time
* Capable of working independently as well as with a global team development environment
* Demonstrated work in a dynamic and agile environment with minimal documentation
* Served as primary customer contact and liaison person
* Exceptional ability to quickly master new concepts

**EDUCATION:**

* Bachelor of Technology in **Information Science and Technology** passed out in 2010, Acharya Nagarjuna University, India

**TECHNICAL SKILLS:**

**Technology\ Tools \**

Python, Django, Flask, Tornado, HTML, \ PyCharm, Visual Studio, Putty, Vagrant, \

CSS, JavaScript, Bootstrap SQL Alchemy, Vim\

**Data Bases \ Application Servers \**

MySQL, SQL, PostgreSQL, Time-Series, \ Apache, Nginx, Gunicorn, Supervisor \

EAV

**Operating Systems \ Version Control \**

UNIX, Linux, MS Windows 2000/2003/NT/\ CVS, SVN, Bazaar, Git\

95/98/XP/Vista/7/8\

**PROFESSIONAL EXPERIENCE:**

**Client: Embitel Technologies Inc March 2017 - Till Date**

**Southfield, MI**

**Project: Solar Tracker – Industrial Automation**

**Role: Python Developer**

**Project Description:**

Solar tracker automation solution is to generate power from solar energy efficiently. Solar panels deployed in large plants will be controlled by cloud application and rotates them to an angle with respect to sun position automatically. Cloud communicates the commands to device’s through gateway using IoT protocol called MQTT. Devices from different plants and regions can be controlled and monitored by using SCADA application which is built using Django web framework. SCADA provides graphical reports, live stats and detailed daily reports of each device. It triggers email alarms to staff users in case of device failure. It records all the actions performed by devices and analytics is performed over the data to derive daily stats on energy stored and consumed.

**My Work Responsibilities:**

* Business requirement gathering and converting business requirements to technical requirements. Served as primary customer contact and liaison person
* Responsible for identifying stories / tasks and estimating efforts and timelines at granular level.
* Responsible for Architecture and design implementation including database schema.
* Researched and proposed technological advancements to a product line based on the current market trends.
* Managing and Leading different teams working on Hardware, Embedded and Backend.
* As a Full stack developer, involved in end to end backend application development.
* Developed web application (SCADA) using python and Django framework.
* Worked on User Interface using Django templating, HTML, CSS, JavaScript, Bootstrap.
* Developed automation solution to communicate commands from cloud to devices.
* Implemented TCP / IP socket programming application using MQTT module which communicates data from cloud to devices and vice versa.
* Developed python MQTT device client for embedded devices.
* Designed and implemented Graphical and PDF reports which will be auto-generated by using python script.
* REST API’s design and implementation for Firmware upgrade over the air.
* Responsible for code reviews, sprint planning and served as a scrum master.
* Involved in cloud application deployment using Nginx and Gunicorn web servers on Amazon EC2.
* Direct communication with client on day to day basis for requirement gathering and production issue resolution.
* Providing help to peers in development and doing their code reviews
* Analyzed and provided fix for most of the critical issues raised by testing team and users.
* Documented all the workflow with design details and flowchart
* Followed proper UAT testing procedures by working closely with the QA team to ensure good data quality and the processes meet the business requirements.
* Provided extended support for Production releases and assisted in validating the releases.
* Worked closely with the Business users acting as liaison between the Business and technology to identify the requirements for new projects
* Provided regular status updates to the client and senior management for the ongoing development work projects/productions issues.
* Suggested and implemented changes to the existing processes and Applications to improve the availability of the applications to the Business.

**Environment:**

**Python, Django, PostgreSQL, MQTT, Nginx, Gunicorn, Linux, HTML, Amazon EC2**

**Client: Embitel Technologies Inc Jan 2016 - March 2017**

**Southfield, MI**

**Project: Home Automation**

**Role: Python Developer**

**Project Description:**

Home Automation is a solution for controlling home appliances or devices remotely. Users can manage, control and monitor their home devices (sensors) from web / mobile application from anywhere via cloud. Cloud application has been built using python and Django web framework and communication between the cloud and devices happens seamlessly via MQTT protocol. Web application has feature called “Modes” where user can group different devices and can control all the grouped devices with single command. It also has web-based service to create chains of simple conditional statements which is nothing but IFTTT, where user can create his own rules and actions from user interface. Data analytics are performed on top of data stored at cloud to identify patterns and to extract reports.

**My Work Responsibilities:**

* Responsible for identifying stories / tasks and estimating efforts and timelines at granular level.
* Responsible for Architecture and design implementation including database schema.
* Managing and Leading different teams working on Embedded and Backend.
* Developed web application using python, Django framework, MySQL
* Explored and evaluated IBM Bluemix Watson services.
* Integrated IBM Internet of Things Foundation service to cloud application for device management and communication.
* Implemented live video streaming from device which is compatible with sockets.
* Involved in Embedded programming for ZigBee communication which works over Mesh network.
* Designed and Developed user and device management module which stores data dynamically.
* Implemented color and movement detection using OpenCV module which alerts user in real time incase of any theft at home.
* Worked on User Interface using Django templating, HTML, CSS, JavaScript, Bootstrap.
* Implemented TCP / IP socket programming application using IBM IoTF module which communicates data from cloud to devices and vice versa.
* Responsible for code reviews, sprint planning and served as a scrum master.
* Involved in cloud application deployment using Apache web server on IBM Bluemix.
* Direct communication with client on day to day basis for requirement gathering and production issue resolution.
* Documented all the workflow with design details and flowchart
* Followed proper UAT testing procedures by working closely with the QA team to ensure good data quality and the processes meet the business requirements.

**Environment:**

**Python, Django, MySQL, IBM IoTF, IBM Bluemix, Apache, Linux, HTML**

**Client: Eicher - Polaris Industries Inc Sept 2015 - Jan 2016**

**Medina, MN**

**Project: Vehicle Fault Analysis**

**Role: Python Developer**

**Project Description:**

Vehicle Fault Analysis is an automation solution to find the defect at component level in the vehicle, Complex algorithms are implemented in this solution which will evaluate the data generated by the vehicle and compares the same with the reference data stored at cloud using machine learning classifiers. Reference data is provided by OEMs which indicates the data of a vehicle in good and bad conditions with respect to automobiles industrial standards. Runtime analytics will be performed to identify the condition of the vehicle and fault component if any. User / Manufacturer can input the vehicle's data using web interface and view the test results and runtime analysis.

**My Work Responsibilities:**

* Responsible for Architecture and design implementation.
* Developed web application using Python, Flask, MySQL
* Developed an automation module which processes chunks of csv file uploaded by an end user in an asynchronous manner.
* Implemented machine learning algorithms and applied different classifiers on top of data to extract accurate results.
* Worked on User Interface using HTML, CSS, JavaScript, Bootstrap.
* Developed automation scripts to automate the batch process which processes huge files and stores test results in to database.
* Responsible for code reviews and sprint planning.
* Deployed application on private cloud using Supervisor, Nginx, Gunicorn web servers.
* Direct communication with client on weekly basis for status updates and production deliverables.
* Documented all the workflow with design details and flowchart.
* Followed proper UAT testing procedures by working closely with the QA team to ensure good data quality and the processes meet the business requirements.

**Environment:**

**Python, Scikit, Scipy, Flask, MySQL, Linux, Nginx, Gunicorn**

**Client: Embitel Technologies Inc Sept 2014 – Aug 2015**

**Southfield, MI**

**Project: Vehicle On-Board Diagnostics**

**Role: Python Developer**

**Project Description:**

Vehicle On-Board Diagnostics is a tool to monitor vehicle OBD parameters and to ensure vehicle is in good condition. Web dashboard is provided to users where user can monitor his vehicle’s parameters and their values in real time and user can configure set of rules to alert him if threshold breaches. Vehicle's CAN data will be collected by cloud at regular intervals of time which helps the OEM's to analyze and fix the issues online if possible. Cloud services computes the data and insists driver by sending an alert or notification to the mobile application. Vehicle's OBD helps the driver by sharing location to mechanic if any breakdown or issue occurs. Cloud constantly monitor threshold levels like tyre pressure, Fuel level, Engine heat level and any malfunction which helps user as well as OEM's to maintain the vehicle in good condition.

**My Work Responsibilities:**

* Responsible for Architecture, design implementation and database schema.
* Implemented asynchronous multithreading in TCP/IP programming.
* Developed module for device and user management.
* Developed web dashboard using HTML, CSS, Bootstrap, JavaScript.
* Designed and implemented Graphical and PDF reports which will be auto-generated by using python script.
* Implemented automation tool which monitors data in near real time and triggers actions on any event which is configured by user.
* Handling relevant Technical Communication with Client
* Working independently and within challenging time frames
* Reviewing code of junior team mates.
* Multi-tasked and work against deadlines/priorities
* Contributed in streamlining the code migration process by syncing up the application scripts between different environments like Production, QA, Dev and UAT
* Deployed application on private cloud using Supervisor, Nginx, Gunicorn web servers

**Environment:**

**Python, Flask, HTML, PostgreSQL, Linux, Nginx**

**Client: Tata Trent Sept 2013 - Aug 2014**

**Novi, MI**

**Project: Inventory Management Enterprise Application**

**Role: Python Developer**

**Project Description:**

Inventory management application is an enterprise web application for Trent staff and admin users to manage and maintain catalogs, products, orders and users. Staff users can perform add / edit / delete operations and will be able to review orders done by end users. In B2B scenarios, bulk orders will be received by Trent and to supply the same to end users, there are several inspection stages that the products must go through. This tool servers the purpose, where Trent staff will fill the form online and submit the inspection results. All the inspection levels, inspection dates and assignments will be auto computed in the backend which reduces manual effort. By using this tool, Trent team is able to successfully deliver quality products to end users without slippages.

**My Work Responsibilities:**

* Developed web application using Python programming, Django and Django Oscar framework.
* Involved in database design and architecture discussions.
* Developed view functions to automate stages based on inspection results.
* Implemented logic for inspection assignments to staff users and scheduling.
* Written Python automation scripts to evaluate and reschedule assignments with automated alerts in case of inspection delays or failures.
* Built custom templates using HTML, CSS, Bootstrap and JavaScript
* Implemented analytics to derive daily turnover and turnover made by each staff user.
* Developed scripts to send automated emails to senior management users which details overall assignments completed, pending on weekly basis.
* Written Unit test cases using Unit testing framework with 95% of code coverage.
* Implemented automation testing using selenium.
* Identified user needs and provided strategic direction.

**Environment:**

**Python, Django, Django Oscar, MySQL, HTML, Linux**

**Client: Veveo Inc, Boston, MA May 2012 - August 2013**

**Project: Web Scraping**

**Role: Python Developer**

**Project Description:**

Crawling Engine which helps for data scraping or crawling from different websites (media sites, tv shows/movies sites, app stores and other social networking sites). Data mining techniques, regular expressions have been used to identify patterns and to extract relevant data from websites. Scraped data will be validated and the same will be stored into MySQL database post to validation. Scrapers are scheduled to run daily at fixed timings using cron tools.

**My Work Responsibilities:**

* Performed analysis on websites to identify the patterns and to crawl data
* Developed API's to crawl data for similar web templates
* Implemented custom script for pumping records into database.
* Scheduling the Crawler for fetching data recursively.
* Developed automation scripts to send alerts if any of the scraper is not responding.
* Performed manual testing to validate scraped details.

**Environment:**

**Python, MySQL, Linux**

**Client: Span Across IT Solutions, India Jan 2011 – April 2012**

**Project: TaxSpanner**

**Role: Python Developer**

**Project Description:**

TaxSpanner is a portal from where users can e-file their income tax returns. It has been built using python and Django Framework. User can upload their income documents through user friendly interface, application computes the data and decides the type of ITR to be filed based on the inputs. Automated system has been built at backend to take care of end to end process with single click. TaxSpanner provides different easy platforms to e-file the income tax returns. User can simply send an email with proper income details attachments, where automation tools will read emails and attachments in real time and processes the data and e-file the return.

**My Work Responsibilities:**

* Developed and automated a logic to read csv / xls / xlsx share transactions and dump the transactions to database
* Designed and developed algorithm to compute and display the user’s income and tax summary
* Developed and implemented Django URLs, views and templates for UI.
* Implemented an algorithm to detect the type of the ITR and type of the return.
* Custom scripts to extract the actions performed by individual user.
* Developed Messaging framework which takes care of sending emails based on admin inputs
* Written Unit test cases using Unit testing framework.
* Implemented python automation scripts using selenium which uploads the transactions files to BillDesk gateway.
* Performed black box, manual and automation testing.

**Environment:**

**Python, Django, PostgreSQL, HTML**