**Joe Mills**

**Python Developer**

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**Summary:**

* Full Stack Python Developer with 6+ years ofexperience in IT in developing as a **Web/Application Developer, server-side** programming using **Python 2.x and 3.x, Flask 1.0.2**, **Django 1.x, Front-end, Test Automation, Testing and debugging, Software development lifecycle, testing all layers of Web Application including frontend, service layer and backend testing.**
* Developed MVC web-based applications using **Python** web frameworks**FlaskandDjango.**
* **Expertise in** Algorithms, Data Structures, Object Oriented Programming,
* Expertise with python libraries**NumPy, SciPy, Matplotliband Pandas**.
* Experience in **Test Driven Environment** and python test tools PyTest, unittest,Pylint, pdb lib.
* Worked on WSGI server, Green Unicorn web server, and NGINX http server environment.
* Worked on **Celery** for task queue implementation and for running periodic tasks. Also experience with Advanced Message Queue Protocol(AMQP) **RabbitMQ** and Redis for caching backends.
* Good experience in Shell Scripting, **SQL Server, UNIX,and Linux**.
* Experience on Data bases **MYSQL, Big Query, Oracle**.
* Experience on Google cloud Platform (GCP), Worked on Integrating google cloud to applications.
* Experienced in Python's modules like NumPy, regular expressions(Regex scripting), Web Scraping, collections, dates & times and OS modules.
* Experience in Object relational mapping(ORM’s), database access with managers and querying.
* Experience with Unit testing/ Test-driven Development (**TDD**), Load Testing.
* Experience with Version Control GIT, and SVN.
* Developed a fully automated continuous integration system using **Git, Circle CI, Semaphore CI.**
* Developed Restful API's integrating web exe with **Django** and **Python** implementations with data exchange through **JSON** and **XML** formats.
* Developed the required **XML** Schema documents and implemented the framework for parsing XML documents.
* Experience in Testing environment using Selenium, automation using python and bug tracking and issue tracking tools **Bugzilla**, and **JIRA**.
* Experience in Python Environments PyCharm, Anaconda, IDLE, Virtualenv, Sublime, Atom, Visual Studio.
* Excellent analytical and problem-solving skills with efficient time management and result oriented attitude.
* Good interpersonal, very hands-on attitude and approach, Inquisitive, Self-determined to learn and improve.

**Technical skills:**

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| **Web Technologies** | JavaScript, CSS3, Bootstrap,HTML5. |
| **Python Libraries** | Beautiful Soup, NumPy, SciPy, Matplotlib, Pandas, urllib2, Tkinter. |
| **Python Web Frameworks** | Flask, Django, Django REST. |
| **Database** | MySQL, SQLAlchemy, PostgreSQL, SQLite, Oracle Database, |
| **Operating System** | Windows, Linux, Unix, MacOS, Ubuntu. |
| **IDE Tools** | PyCharm, IDLE, WebStorm, Sublime Text, Anaconda, PyDev, Pip, Atom, IPython, Eclipse, Spyder, PyQt, Visual Studio, Eclipse, Notepad++, Git, Komodo Edit. |
| **Web Services** | SOAP, REST, WSDL. |
| **Methodologies** | OOPS/OOAD, MVC, UML. |
| **Version Control** | SVN, GIT, Clear case. |
| **Tools** | Jenkins, Eclipse, Edit Plus, Apache Ant, log4j, JUnit, Visio, ANT. |
| **Web/App. Servers** | WSGI, NGINX, Green Unicorn, Linode, WebSphere Application Server 8.0, Apache Tomcat, Web Logic 11g/ 12c, JBoss 4.x/5.x, Apache Drill. |
| **CloudTechnologies** | Google cloud platform (GCP), Data flow modelling. |

**PROFESSIONAL EXPERIENCE:**

**Python Developer, Sunrun Inc. – San Francisco, CA Jan 2018 – Present**

Sunrun is a pioneer of the solar-as-a service model which provides residential rooftop solar, storage and energy services, while reducing the amount of air pollution leading to a better, less expensive and cleaner way for families to power their homes. Our mission is creating a planet run by sun.

Roles and Responsibilities:

* Worked with the Business Intelligence team and played a major role in developing backend python applications, DevelopedFlask based applications, developed innovative ways to ingest large data sets into Google cloud, also automated various jobs to load data from multiple sources to cloud.
* Tested the applications and developed automated process to perform various tests using PyTest.
* Developed backend applications to track performance issues of rooftop solar to help the business, logistics and process product usage data.
* Designed Data Flow pipelines with apache beam for transferring large data to Google cloud with Python.
* Worked on creating Multi-threading, Establishing Connection Pools while optimizing application performance and executing multiple tasks with python.
* Developed dashboards for tracking customer product performance issues, where I gained experience in developing frontend Web application using Flask 1.0.2, HTML, CSS, Bootstrap and JavaScript.
* Developed many automation scripts for Web Scraping, pattern matching, Requests, Task automation, Integrated various API’s.
* Done data migrations to load data from FTP Servers, google drive, and other sources to GCP BQ tables in google cloud storage using python. Developed reusable scripts to automate the process.
* Worked on data validation and data analysis, where I gained experience in python libraries pandas, NumPy, matplotlib.
* Responsible for delivering the application on Time and introduced innovative methods to improve performance, quality and developed validated tests, solved issues as required.

**Environment: Python 2.7, Python 3.6, Debian GNU/Linux v9, Google Cloud platform (GCP), PyTest, GCP, Big Query, Pandas, NumPy, Flask 1.0.2, HTML, CSS, Bootstrap, JavaScript, GIT, PyCharm, sublime.**

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**Python Developer**

**DirecTV/ AT&T Entertainment Group – El Segundo, CA Sept 2015 to Dec 2017**

**Description:** DirecTV (stylized as DIRECTV) is an American direct broadcast satellite service provider based in El Segundo, California and is a subsidiary of AT&T. Worked on Development of Application for Video Subscription on Demand, Live tracking of events, subscriber data analysis, keep track of user responses and customer feedback.

**Responsibilities:**

* Participated in all the stages of software development lifecycle like design, development, and implementation and testing while designing high performance and low latency application**.**
* Used **Django Framework** in developing web applications to implement the model view control architecture along with Django's ORM model.
* Developed Views and Templates with Python3.6 and to create a user-friendly website interface Django's view controller and template language is used.
* Contributed to develop more secured application and reducing response time for various user requests.
* Worked on creating Connection Pools while optimizing application performance and executing multiple tasks with python and PostgreSQL.
* Developed API’s, implemented authorization, making requests to various web servicesfor client requests with Django REST framework.
* Web crawler that runs the whole day indexing and tracking price changes, Generate generic activity streams from the actions on the site.
* Used Celery and RabbitMQ message broker for Asynchronous tasks, and for scheduling periodic tasks.
* Automated regular tasks, filtering data, **pattern matching** with regular expression and **web scraping**.
* Developed python/Django based web application, **PostgreSQL** DB, and integrations with 3rd party email messaging storage services.
* Worked on various data format JSON, XML converting to python data and delivering better content.
* Used Python3.6 library BeautifulSoup for web scrapping to extract data for building graphs.
* MySQL Procedures and UNIX Shell Scripts were designed and developed for Data Import/Export and Conversions.
* Generated Python Django Forms to collect data of online users, creating pools and Q&A submissions.
* Used data manipulation libraries based on **Pandas** based on NumPy utilising various functions accessing, **indexing, merging and grouping data** easily using python3.6.
* A Django dashboard with a custom look and feel for end user has been created after a careful study of the Django admin site and dashboard.
* Worked on **Data Frames** handling large incoming data streams with **pandas and plotting using matplotlib**.
* Also worked on **Numerical data analysis** and scientific computations using **NumPy and SciPy modules**.
* Unit Test Python library was used for testing many programs on python and other codes.
* For sending and receiving the data between multiple systems **RESTful Web-Services** were implemented.
* Collaborated with QA to build and populate DB and to ensure the standards.

**Environment**: **Python 3.5/3.6, Python 2.7, Celery, RabbitMQ, Django 1.4, PostgreSQL, Java Script, HTML, JSON, XML, CSS, MySQL, Bootstrap, Git, Linux, PyCharm, Pandas, NumPy, JIRA.**

**Software Developer**

**PayPal, Inc. - San Jose, CA. Jan 2013 to August 2015**

**Description:** PayPal Holdings, Inc. is an American company operating a worldwide online payments system thatsupports online money transfers and serves as an electronic alternative to traditional paper methods like checks and money orders. Developed an application that fetches the reports and other data from the website and fills that data into the respective tables into the database. Analysts can use that data to generate reports and other visualizations.

**Responsibilities**:

* Associated with various phases of Software Development Life Cycle (SDLC) of the application like requirement gathering, Design, Analysis and Code development.
* Designed budget spending analysis module to users based on their account usage, transactions and allowing users to set limits based on data analysis done by our application.
* Allowing payment authorizations through various services for our end clients.
* Managed datasets using Panda data frames and MySQL queried MYSQL database queries from python using Python-MySQL connector and MySQL DB package to retrieve information.
* Wrote and executed various MYSQL database queries from python using Python MySQL connector and MySQL dB package.
* Used MySQL as the backend database and **MySQL dB** of python as database connector to interact with **MySQL** server.
* Involved in design, implementation and modifying the **Python code** and **MySQL** database schema on-the-back end.
* Wrote **Python** scripts to parse **JSON** documents and load the data into the database.
* Responsible for setting up **Python REST** API framework using Django.
* Used NumPy and Matplotlib libraries. Created bar charts using matplotlib library.
* Followed Agile methodology and involved in daily SCRUM meetings, sprint planning, show cases, and retrospective and used **JIRA** as a tracking tool for the sprints.
* Worked on handling large array of user data and dedicated in plotting and analysingthat data using various data Frames and **NumPy and SciPy Modules**.
* Interfacing with supervisors, artists, systems administrators, and production to ensure production deadlines are met.
* Collaborated with internal teams to convert end-user feedback into meaningful and improved solutions.

**Environment:Python 3.6, MySQL dB, Shell Scripting, JSON, Matplotlib, NumPy, PyTest, Sublime, JIRA, GIT.**