**Shashank**

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**Python Developer**

**Professional Summary**

* Around 7 years of experience as a Python Developer and coding with an analytical programming using Python, Django.
* Experienced with Amazon AWS Cloud Administration which includes services like: EC2, S3, EBS, VPC, ELB, AMI, SNS, RDS, IAM, Route 53, Auto scaling, Cloud front, Cloud watch, Cloud Trail, Cloud Formation, OPS Work, Security Groups.
* Worked on standard python packages like boto and boto3 for AWS.
* Experienced with full software development life cycle, architecting scalable platforms, object-oriented programming, database design and agile methodologies and having experience in MVC frameworks like Django, Angular JS, Java Script, jQuery and Node.js.
* Well versed with design and development of presentation layer for web applications using technologies like HTML, CSS, and JavaScript.
* Experience in Object oriented Design and Programming concepts.
* Deep understanding of MapReduce with Hadoop and Spark. Good knowledge of Big Data ecosystem like Hadoop (HDFS, Hive, Pig, Impala), Spark (SparkSql, Spark MILib, Spark Streaming.
* Experienced in WAMP (Windows, Apache, MYSQL, Python /PHP) and LAMP (Linux, Apache, MySQL, and Python/PHP) Architecture.
* Experienced in developing web-based applications using Python, Django, PHP, XML, CSS, HTML, JavaScript and jQuery.
* Experienced in installing, configuring, modifying, testing and deploying applications with Apache and familiar with JSON based REST Web services and Amazon Web services.
* Proficient in managing entire data science project life cycle and actively involved in all the phases of project life cycle including data acquisition, data cleaning, Engineering, features scaling, features engineering, statistical modeling (Decision Trees, Regression Models, Neural Networks, Support Vector Machine (SVM), Clustering), dimensionality reduction using Principal Component Analysis and Factor Analysis, testing and validation using ROC plot, K - fold cross validation and Data Visualization.
* Experience in writing Sub Queries, Stored Procedures, Triggers, Cursors, and Functions on MySQL and Postgre SQL database.
* Worked in agile and waterfall methodologies with high quality deliverables delivered on-time and also maintained detailed documentation and architectural solutions in IT infrastructure and sales systems.
* Experience in foundational Machine Learning Models and concepts are Regression, Random Forest, Boosting, GBM, NNs, HMMs, CRFs, MRFs, Deep Learning. Experience with continuous integration and automation using Jenkins and have experience with Unit testing/ Test driven Development (TDD), Load Testing.
* Created video publishing toolkit using WordPress (PHP/MySQL) and JavaScript to allow easy uploading of video by non-technical content mangers.
* Developed the required XML Schema documents and implemented the framework for parsing XML documents.
* Involved in Unit testing and Integration testing and extensive use of Linux (Ubuntu), SSH, Flask/Django and developed ColdFusion Components, custom tags and modified CF Objects.
* Worked on AJAX framework to transform Datasets and Data tables into HTTP-serializable JSON strings.
* Good experience in developing web applications implementing Model View Controller architecture using Django web application framework
* Design and implement large scale business critical systems.
* Experience in developing web-based applications using Python 3.6/3.4, Django 1.11/1.9
* Develop web applications, RESTful web services and APIs using Django.
* Good knowledge of server Apache Tomcat, Web logic.
* Experienced in working with various Python IDE's using PyCharm, Spyder.
* Implement different python libraries Beautiful Soup, matplotlib, NumPy, SciPy, pytables, python-twitter, Pandas data frame, Pyvmomi, Fabric and urllib2 in various tasks.
* Experienced in NoSQL technologies like MongoDB, Cassandra and relational databases like Oracle, SQLite, PostgreSQL and MySQL databases.
* Experience on Web development using HTML4/5, CSS/CSS3, JavaScript, jQuery, Angular JS, AJAX, XML and JSON by following W3C standards.
* Most of the applications were developed with Python, Django, and PostgreSQL using Agile Methodology.
* Good Experience in debugging the issues using pdb.
* Extensive experience in developing applications using Java API, Swing, HTML 4/5, Flex, JavaScript, CSS2/3, JQuery, JDBC, JSF, JMS, XML.
* Leveraging queueing architectures with Rabbit MQ for scalability, performance, and building.
* Knowledge in working with continuous deployment using Heroku and Jenkins.
* Proficient in writing unit testing code using Unit Test/PyTest and integrating the test code with the build process.
* Worked on Python Testing frameworks like zope, pytest, nose and Robot framework.
* Well versed with Agile with SCRUM, Waterfall Model and Test driven development methodologies.
* Experienced in writing SQL Queries, Stored procedures, functions, packages, tables, views and triggers

**Technical Skills:**

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| --- | --- |
| **Data Engineering** | PySpark, Python, Unix shell scripting, ETL, Data Lake |
| **AWS** | EC2, S3, RDS, VPC, Lambda, Redshift, Glue, Athena, StepFunction, dynamo db, AWS Glue |
| **Databases** | Oracle, Microsoft SQL, Teradata, MySQL, PostgreSQL |
| **Scripting** | Python, Unix, Hive, PL SQL, PySpark, Spark SQL. |

**Professional Experience**

**Fannie Mae Reston, VA**

**Python/AWS Developer March 2020 – Current**

**Responsibilities:**

* Worked on migrating the on-premises databases to AWS cloud platform.
* Created the data lake in S3 bucket with structure and unstructured data.
* Using CLI commands moved the data from local server to S3 bucket.
* Created the AWS glue jobs to load the data from on on-premises databases to S3 bucket.
* Written the pyspark script in AWS glue to load process data from s3 raw to stage bucket.
* Created AWS glue job to move data from S3 bucket to redshift DB.
* Used the Athens to Query the structure files in S3 bucket.
* Worked on AWS environment and technologies such as S3, EC2, EMR, Glue, Lambda, Redshift, DynamoDB and snowflake.
* Developed the PostgreSQL tables to store the metadata information.
* Developed the Pyspark code for AWS glue jobs and integrated them with AWS data lake and its services.
* Designed detail migration plans for workloads from third party data and cloud platforms to AWS and executed them successfully.
* Transformed, manipulated, and cleansed the data using Python.
* Setup Spark EMR to process huge data which is stored in Amazon S3
* Worked on AWS environment and technologies such as S3, EC2, EMR, Glue, CFT, Lambda and databases Oracle, SMS, DynamoDB, MongoDB.
* Developed the Pysprk code for AWS glue jobs and integrated them with AWS data lake and its services.
* Worked with AWS based Data ingestion and transformations.
* Designed detail migration plans for workloads from third party data and cloud platforms to AWS and executed them successfully.
* Implemented logging framework - ELK stack (Elastic Search, Logstash Kibana) on AWS.
* Transformed, manipulated, and cleansed the data using Python.
* Sourcing from different databases to S3 bucket using the Python.
* Setup Spark EMR to process huge data which is stored in Amazon S3.
* Developed and implemented Apache NIFI pipelines across various environment.
* Good experience in workflow management using Airflow.
* Good knowledge on Kafka streams API for data transformation.
* Worked on CI/CD deployments using Jenkins.
* Worked extensively in creating hive partition and bucket tables on HDFS.
* Performing Data validation operation between ETL and Apache Hive tables.
* Implementing the Partitioning and bucketing for faster query processing in Hive Query Language.
* Manage and monitor Hadoop log and spark log files of the jobs.
* Developed the shell scripts for migrating and deploying in Production Servers.
* Apply different HDFS formats and structure like Parquet, Avro, etc. to speed up analytics.
* Fine tune Hadoop applications for high performance and throughput, troubleshoot and debug any Hadoop ecosystem run time issues.

**Environment:** Pyspark, Python, EC2, S3, RDS, VPC, Lambda, Redshift, Glue, Athena, Abinitio, Oracle database, Data ware housing, ETL, PLSQL, Unix shell scripting.

**Global foundries Malta, NY**

**Python/AWS Developer July 2018 – March 2020**

**Responsibilities:**

* Designed database Model, APIs and Views utilizing Python to build an interactive web-based application.
* Involved in building database Model, APIs and Views utilizing Python, to build an interactive web-based solution.
* Installed Workstation, Bootstrapped Nodes, Wrote Recipes, and Cookbooks and uploaded them to Chef-server, Managed On-site OS/Applications/Services/ Packages using Chef as well as AWS for EC2/S3&ELB with Chef Cookbooks.
* Used Amazon Elastic Beanstalk with Amazon EC2 to deploy project into AWS.
* Developed Chef Cookbooks, and recipes to automate deployment environment configuration.
* Developed a fully automated continuous integration system using Git, Jenkins, MySQL and custom tools developed in Python and Bash.
* Collect data that introspects the performance of query and update operations on a MongoDB instance and recorded the online users' data using Python Django forms and implemented test case using Pytest
* Develop consumer-based features and applications using Python, Django, HTML, Behavior Driven Development (BDD) and pair-based programming.
* Used jQuery and AJAX calls for transmitting JSON data objects between front end and controllers and Utilized continuous integration and automated deployments with Jenkins, Ansible and Docker.
* Used Amazon Elastic Beanstalk with Amazon EC2 to deploy project into AWS and good experience with AWS storage services (S3).
* Used NumPy for Numerical analysis and several python libraries like SymPy, wxPython and matPlotLib.
* Experience to build CI/CD Pipeline to automate the code release process using Integration tools like Git/SVN, GitHub, Jenkins.
* Experience in setting up CI/CD pipeline integrating various tools with Jenkins to build and run Terraform jobs to create infrastructure in AWS.
* Followed AGILE development methodology to develop the application and developed Golang API and chat-bot using TDD to automate software deployments and rollbacks
* Developed a portal to manage and entities in a content management system using Python and Django. Utilized Jenkins to deploy the Django application and run unit tests.
* Managed large datasets using Pandas API ecosystem to analyze the different segments of customers based on Location.
* Developed project's web page as Single Page Application (SPA) by using AngularJS and JavaScript API and build delivery driver application.
* Developed data processing tasks using PySpark such as reading data from external sources, merge data, perform data enrichment and load into target data destinations. Utilized pandas, NumPy, SciPy, and nltk libraries to create unique reports and analysis.
* Involved in creating initial website prototype from Django skeleton and building out Views, Templates using CSS for whole site following Django MVC architecture and HTTP methods, RESTful architecture.
* Involved in development of Python based Web Services using REST for sending and getting data from the external interface in the JSON format and to track sales and perform sales analysis using Django and PostgreSQL.
* Extracted log from Git using Python and performed data cleaning using regex to generate the Changelogs for comparing different software versions.
* Developed a fully automated continuous integration system using Git, Gerrit, Jenkins, MySQL and custom tools developed in Python and Bash.
* Worked in DevOps group running Jenkins in a Docker container with EC2 slaves in Amazon AWS cloud configuration. Also gained familiarity with supporting technologies like kubernetes and Mesos.
* Processed the Web server logs by developing Multi-Hop Flume agents by using Avro Sink and loaded into MongoDB for further analysis. Extracted files from MongoDB through Sqoop and placed in HDFS and processed it using Hive.
* Developed Spark Script with PySpark, Java using PyCharm Spring Boot IDE that performs the internalization process.
* Wrote and executed various MySQL database queries from Python using Python-MySQL connector and MySQL dB package.

**Python Developer Irving, Texas**

**PAYPAL May 2017 to July 2018**

**Responsibilities:**

* Worked on transformation of inheritance and outsourced UI by using JavaScript, Bootstrap, Ember.js, Backbone.js, Angular Js, Node.js, React.js and jQuery.
* Used Angular MVC and two-way data binding. Worked on automation scripts using Selenium in JAVA. Experience in using JavaScript build tools and dependency management like Grunt, npm.
* Designed and developed the user portal using JavaScript, React, Ember.js, Backbone.js, Angular.JS along with HTML, CSS and Bootstrap.
* Wrote python scripts to parse XML documents and load the data in database.
* UI development technologies such as JavaScript, CSS3, HTML5, GWT
* Good understanding in JavaScript, Angular.js, Bootstrap, Ember.js, Jasmine, Karma, Backbone.js, React.js, MyBatis, require.js, node.js framework concepts and Responsive Design.
* Scalable, database-driven web application development using a variety of frameworks: ASP.NET on C#, Flask on Python, and PHP.
* Developed and implemented UI controls and APIs with JavaScript, Bootstrap, Ember.js, Backbone.js, Angular.js and Node.js. Used Node.JS for asynchronous data communication between server and client.
* Built Web pages that are more user-interactive using jQuery plugins for Drag and Drop, Auto Complete, JSON, Angular JS, JavaScript, Bootstrap
* Used Python and Django to interface with the jQuery UI and manage the storage and deletion of content.
* Involved in development of Web Services using SOAP for sending and getting data from the external interface in the XML format.
* Automated the continuous integration and deployments using Jenkins, Docker, Ansible and AWS Cloud Templates.
* Installed and maintained Jenkins for Continuous Delivery as well as automate Ansible Playbook runs against production infrastructure
* Managed datasets using Panda data frames and MYSQL. Queried the database queries using Python-MySQL connector and retrieved information using MySQLdb.
* Used Pandas library for statistical Analysis.
* Developed (TDD) and continuous deployment & continuous integration CI/CD using Jenkins.
* Configured and scheduled jobs for multiple projects on Hudson.
* Pioneer application hosting on cloud infrastructure using Amazon Web Services AWS.
* Used JavaScript & Titanium tools. Implemented the entire Prototype of email app, including SQL Lite database schema and query design, JS based HTTP request to fetch email data and UI design & implementation.
* Worked on modifying existing FluentD plugins to write to Splunk
* Used Python (libraries used: libraries- Beautiful Soup, Numpy, Scipy, matplotlib, python-twitter, Pandas data frame, network, urllib2, MySQL for database connectivity).
* Accessed and manipulated the Oracle database environment by writing SQL queries in the oracle sql developer for testing purpose. Managed Database design, creation and querying of the whole project. Wrote MySQL queries, store procedures and triggers.
* Used Numpy for Numerical analysis for Insurance premium
* Utilized Python libraries wxPython, numPY, Twisted and matPlotLib.
* Automated the continuous deployment & continuous integration process using Jenkins and TeamCity.
* Involved in enhancing the build procedures using Maven and Hudson jobs.
* Used AWS Amazon Web Services EC2 to deploy our team's projects on to the public cloud.
* Consumed web services using VB.NET to interact with the other applications and exposed them using SOAP and HTTP. Designed and developed user interfaces using JSP, HTML, JSON, JQuery and CSS
* Developed automation scripts to test storage appliances in Python.
* Rewrite existing Python/Django modules to deliver certain format of data.
* Experience in developing scalable front-end user interfaces using HTML, CSS, Backbone and JavaScript, JQuery, Angular.JS and Mongo DB.
* Created hybrid cloud by combining private cloud and public cloud (using AWS Amazon web services) and used it for public scaling.
* Written Cloud formation templates and deployed AWS resourcing.
* Build application and database servers using AWS EC2 and create AMIs alsousing RDS for Oracle DB.
* Extensively used python modules such as requests, urllib, urllib 2 for web crawling.
* Deployed mircoservices2, including provisioning AWS environments using Ansible Playbooks.
* Having Knowledge on AWS Lambda, Auto scaling, Cloud Front, RDS, Route53, AWS SNS, SQS, SES.
* Gained Knowledge on Deploying apps using AWS Cloud Formation.
* Experience in using various version control systems like Git, CVS, GitHub, Heroku and Amazon EC2.

**Environment:** CSS, HTML5, JSP, Python, Jenkins, Hudson, Ansible , Numpy, AWS, Cloud, HTTP protocol, JSON, Javascript, Node.Js, Bootstrap.Js, React.js, Angular.Js, Powershell, Backbone.Js, DB2, Grafana, CRUD, PL/SQL, JDBC, Cassandra, NoSQL, MongoDB, MySQL, MS SQL, Grafana, Web Services, Splunk, REST, SOAP, Panda, Junit, Jira, GIT, GITHUB, Subversion (SVN), Maven,Chef, SOA, JMS, Tomcat, EC2, Linux, UML, Eclipse Agile, Scrum, Test Driven Development.

**Software Developer**

**BNY MELLON**, Pune, India

May 2012 – March 2014

**Responsibilities:**

* Utilized Python libraries wxPython, numPY, Twisted and matplotlib and Designed jQuery libraries for all client-side JavaScript manipulations.
* Worked on Element Tree XML API in python to parse XML documents and load the data in database.
* Managed worldwide data in Omniture for data collection and analysis and worked on the library like pandas, NumPy, SciPy, Docker.
* Used Go Lang to create backend servers. Developed Micro services using Go language and developed corresponding test cases.
* Instituted configuration and systems management via Ansible; inventoried and standardized system configurations and package installations; trained other team members in the use of Git and Ansible.
* Implemented SQLAlchemy which is a python library for complete access over SQL.
* Used Amazon Elastic Beanstalk with Amazon EC2 to deploy project into AWS.
* Wrote with object-oriented Python, AWS, Flask, SQL, Beautiful Soup, httplib2, Jinja2, HTML/CSS, Bootstrap, jQuery, Linux, Sublime Text, GIT.
* Worked on Python OpenStack APIs and used Numpy for Numerical analysis.
* Involved in application of various learning algorithms and statistical modeling like decision trees, text analytics, natural language processing (NLP), supervised and unsupervised, regression models, social network analysis, neural networks, deep learning, SVM, clustering to identify Volume using scikit-learn package in python, Mat-lab.
* Developed views and templates with Python and Django's view controller and templating language to create a user-friendly website interface.
* Developed various AngularJS directives to help build the functionality and UI behavior using JavaScript with extensive knowledge of and use of Angular JS directives to bring additional functionality to HTML.
* Implemented business logic using Python Web framework Django and designed applications implementing MVC architecture in Pyramid, Zope frame works.
* Installed, configured and managed the ELK (Elastic Search, Log Facilitated Scrum ceremonies like Sprint planning, retrospectives, Daily stand-ups, etc. Stash and Kibana) for Log management within EC2/ Elastic Load Balancer (ELB) for Elastic search.
* Involved in Continuous Integration (CI) and Continuous Delivery (CD) process implementation using Jenkins along with Shell script.
* Worked in team of developers to build and deploy Flask, Linux, and AWS.
* Executed Terraform to manage the AWS infrastructure and managed servers using configuration management tools like Chef and Anisole.
* Designed datasets using Panda data frames and MySQL, queried MYSQL database queries from python using Python-MySQL connector and MySQL dB package to retrieve information.
* Built various graphs for business decision making using Python matplotlib library.
* Used Python library NumPy Beautiful Soup for web-scraping and used Django Database API's to access database objects.
* Utilized Python libraries like NumPy and matplotlib for generating graphical reports and developed server-based web traffic statistical analysis tool using Flask, Pandas.
* Worked on the development of SQL and stored procedures for normalization and denormalization in MYSQL.
* Involved in Container management using Docker by writing Docker files and set up the automated build on Docker HUB and installing and configuring Kubernetes.
* Designed and implemented open source AI frameworks - Pytorch, TensorFlow, Scikit-learn, Apache Open Source (Kafka, Storm, Spark) for NLP and ML Algorithms.
* Implemented the application in LINUX environment and comfortable with all its commands.

Professional Skills:

* Programming Languages: Python .C/C++, Core Java, Shell Scripting, Scala.
* Python Technologies: Django, Flask, Tornado, Beautiful Soup, httplib2, Jinja2, NumPy, Pandas, Matplotlib, Pickle, PySide, SciPy.
* Application/Web Server: Oracle WebLogic, HTML, DHTML, AngularJS, Tomcat, Apache, JCSS, Maven, Django, NumPy, ASP.Net, Kubernetes.
* Development Tools: AWS, Docker, Selenium, Sublime Text, Eclipse, Jenkins, Coverity.
* Databases: Microsoft SQL Server, Oracle, MySQL, PostgreSQL and NoSQL databases MongoDB, Cassandra.
* Testing Tools: Selenium and Jira
* Methodologies: Agile (Scrum), Waterfall.

**Education & Credentials:**

Master’s in Industrial Engineering – Lawrence Technology University - 2017