**Prashanth**

**Sr Python/Full Stack Developer/AWS-Cloud Engineer**

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**SUMMARY:**

* Around 9 Years of professional experience in Analysis, Design, Development, and Implementation of various client-server applications in Python, JavaScript.
* AWS Certified Cloud Practitioner
* Architecture/design and deployment of solutions using Amazon Web Services (AWS).
* Designed, configured and managed public/private cloud infrastructures utilizing Amazon Web Services (AWS) including EC2, Auto-Scaling in launching EC2 instances, Terraform, Elastic Load Balancer, Elastic Beanstalk, S3, Glacier, Cloud Front, RDS, VPC, Direct Connect, Route53, Cloud Watch, Cloud Formation, IAM, SNS, Lambda, ECS, EKS and Snowball.
* Proficient in leveraging Boto3 to interact with AWS services such as EC2, S3, DynamoDB, and Lambda, enabling efficient resource management and orchestration.
* Experienced with full software development life cycle (SDLC), object-oriented programming (OOPs), architecting scalable platforms, database design and agile methodologies.
* Experienced in developing web-based applications using Python, DJANGO, GTK, QT, C++, XML, CSS, HTML, DHTML, HTMX, JavaScript, ReactJS, Redux and jQuery.
* Hands-on Experience in Data Management, Data Security, Data Modeling, Workflow Automation, Formulas & Validations, Chatter.
* Ability to install, configure and maintain Linux hosts and popular open source applications such as Nginx, Apache HTTPd, Apache Tomcat.
* Experience in using Python to analyze Big Data using PySpark
* Experience in developing Microservices, producing and consuming JSON objects from Kafka messaging system
* Experience in developing web applications by following Model View Control (MVC) Architecture using server-side application Django.
* Knowledge about setting up Python REST API Framework using Django.
* Experience in developing REST API using Flask and Fast API
* Hands on experience on WAMP (Windows, Apache, MYSQL, and PHP) and LAMP (Linux, Apache, MySQL, and PHP) architecture.
* Exceptionally solid background in composing API's along with Web Services over Python.
* Experience working knowledge in UNIX and Linux shell environments using command line utilities.
* Experience with Unit Testing / Test Driven Development (TDD), Load Testing and Integration Testing.
* Experienced in version control systems using CVS, SVN and Git/GitHub and issue tracking tools like Jira and Bugzilla.
* Experienced in writing SQL Queries, Stored procedures, functions, packages, tables, views, triggers.
* Experience in building frameworks and automating complex workflows using Python for Test Automation.
* Experience in implementing with server-side technologies with REST API and MVC design patterns with ReactJS and Django framework.
* Using Terraform as a tool, Managed different infrastructure resources in Cloud, VMware, Bare Metal Servers and Docker containers.
* Written Templates for AWS infrastructure as code using CloudFormation to build staging and production environments.
* Hands on experience in using NoSql libraries like MongoDB, Cassandra, Redis and relational databases like Oracle, SQLite, PostgreSQL and MYSQL databases.
* Experience in deploying applications in heterogeneous Application Servers TOMCAT, Web Logic and Oracle Application Server.
* Good Knowledge in Amazon AWS concepts like EMR and EC2 web services which provides fast and efficient processing of Big Data.

# Automate Datadog Integrations through Ansible Scripts for QA, Regression and Prod environments.

* Implemented a CI/CD pipeline involving BitBucket, Jenkins, Groovy, Chef, Docker, and Selenium for complete automation from commit to deployment.
* Proficiency with the application servers like WebSphere, WebLogic, JBOSS and Tomcat.
* Proficient in Object oriented design experience, with extensive experience of Python-C/C++ binding using Boost Python and Python C types.
* Developed ETL pipelines in and out of data warehouse using combination of Python and spark.
* Experienced in writing API’s and Web Services in Python and developed Rest API for the projects by using cloud platforms like Amazon AWS and Google App Engine.
* Experience in working with different operating systems like LINUX, UNIX, and WINDOWS

**Technical Skills**

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| --- | --- |
| **Languages**: | Python 3.x / 2.x, C, C++, Java, R, JavaScript, SQL, Shell Script, PHP |
| **Python Libraries** | Python, Django, Flask, FastAPI, PySpark, Beautiful Soup, httplib2, Jinja2, HTML/CSS, Bootstrap, jQuery, Numpy, Matplotlib, Pickle, Pyside, SciPy, wxPython, PyTables, pdb |
| **Framework/Tools**: | ReactJS, Node.js, AngularJS, Spark, Hadoop, Kafka Messaging System |
| **Databases**: | NoSQL, MongoDB, MS SQL, MySQL, Oracle, PostgreSQL |
| **Web Technologies**: | XML, CSS, HTML, DHTML, JavaScript, jQuery, MVC3, Bootstrap, RESTful, AJAX , Node.js, ReactJS |
| **Cloud Technologies**: | AWS (EC2, VPC, S3, IAM, Elastic Beanstalk, Terraform, CloudFormation ), Microsoft Azure |
| **Web Services**: | SOAP, REST, GraphQL, Microservices Architecture |
| **Tools & IDE**: | Eclipse, PyCharm, Scripter, Spyder, Visual Studio Code |
| **Methodologies**: | Agile, Scrum |
| **Operating Systems**: | Window, UNIX, Linux |
| **Backup/Monitoring Tools** | S3 (Simple Storage Service), Cron Jobs, Cloud watch,  Splunk, Nagios |
| **Source Control** | GIT, SVN, Bitbucket |
| **Cluster Management** | Kubernetes, Docker Swarm |
| **Configuration Management** | Ansible, Puppet, Chef |

**Professional Experience**

**Delta Air Lines, Atlanta, GA July 2020 – Present**

**Role: Python Developer Responsibilities**

* Responsible for understanding requirements from Business Requirement Document, system analysis, design,

development, testing, and deployment.

* Involved in building database Model, APIs and Views utilizing Python, to build an interactive web-based solution.
* Developed RESTful web services and APIs using Python, Flask
* Worked on server-side applications with Django using Python programming and used Python libraries like Beautiful Soup, Matplotlib, SciPy, NumPy.
* Updated Django python view for different role for CART dashboard
* Good involvement with creating web applications and actualizing Model View Control (MVC) design utilizing worker side applications like Django.
* Created scaling enterprise application to coordinate article review and management.
* Developed tools to automate some base tasks using Python, Shell scripting and XML. Used PyQT to implement GUI for the user to create, modify and view reports based on client data.
* Worked with View Sets in Django-REST framework for providing web services and consumed web services performing CRUD operations.
* Involved in development of Python based Web Services using REST for sending and getting data from the external interface in the JSON format and perform analysis using Django and PostgreSQL.
* Built API handling interface to add the layer of abstraction between Article API and 100s of customers.
* Used AWS cloud platform and its features, which includes EC2, S3, ROUTE53 VPC, EBS, AMI, SNS, RDS AND CLOUD WATCH.
* Built and maintained Python scripts and applications utilizing Boto3 to interact with AWS services, such as EC2, S3, Lambda, DynamoDB, and others.
* Used the AWS -CLI to suspend on Aws Lambda function used AWS CLI to automate backup of ephemeral data stores to S3 buckets EBS.
* Created templates for CloudFormation and Terraform to automate custom infrastructure provisioning and deployment of applications via the AWS Marketplace*.*

# Implemented Terraform modules for deployment of applications across multiple cloud providers.

* Gathered Semi structured data from S3 and relational structured data from RDS and keeping data sets into centralized metadata Catalog using AWS GLUE and extract the datasets and load them into Kinesis streams.
* Worked as part of an Agile/Scrum based development team and exposed to TDD approach in developing applications.
* Involved in the Web/Application development using Python 3.5, HTML5, CSS3, AJAX, JSON, and jQuery.
* Develop and tested many features for dashboard using Python, Bootstrap, CSS, JavaScript, and jQuery.
* Generated Python Django forms to record data of online users and used PyTest for writing test cases.
* Implemented and modified various SQL queries and Functions, Cursors and Triggers as per the client requirements.
* Clean data and processed third party spending data into maneuverable deliverables within specific format with Excel macros and python libraries such as NumPy, SQLAlchemy and matplotlib.
* Used Pandas as API to put the data as time series and tabular format for manipulation and retrieval of data.
* Helped with the migration from the old server to Jira database (Matching Fields) with Python scripts for transferring and verifying the information.
* Worked on designing and deploying a multitude application utilizing almost all the main services of the AWS stack (like EC2, S3, RDS, VPC, IAM, ELB, EMR Cloud watch, Route 53, Lambda and Cloud Formation) focused on high availability, fault tolerance environment.
* Deployed and tested different modules in Docker containers and GIT. Implemented programming automations using Jenkins, Groovy and Ansible on Unix/Linux based OS over cloud like Docker.
* Developed SQL Queries, Stored Procedures, and Triggers Using Oracle, SQL, and PL/SQL

**Environment:** Python, Flask, pymongo, Kafka-python, multiprocessing, threading, XML, JSON, Kafka, REST, API, AWS, NoSQL (MongoDB), Ansible, GitHub, Agile and Linux.

**State Farm, Bloomington , IL February 2018 – June 2020**

**Role: Python Developer Responsibilities:**

* Developed and tested many features for a dashboard using Python, Java, Bootstrap, CSS, JavaScript, and jQuery
* Managed and reviewed the Hadoop log file and worked in analyzing SQL scripts and designed the solution for the process using PySpark.
* Developed PySpark scripts to clean data for processing
* Used Panda data frames and MySQL, queried MySQL database queries from python using Python-MySQL connector
* Developed entire frontend and backend modules using Python on Django Web Framework with GIT.
* Developed backup and recovery engine for VM backup/recovery using VMware vSphere APIs, Golang programming language and RabbitMQ Message bus (communication interface).
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Scraping website using Python Beautiful Soup, and then parsed it with XML.
* Outputting the parsed data as JSON and stored into MongoDB
* Used NLTK and StanfordNLP to process text data and created offline intelligence.
* Querying data from MongoDB and use them as input for the machine learning models
* Using AWS for application deployment and configuration.
* Wrote UNIX shell scripting for automation.
* Developed views and templates with Django view controller and template Language to create a user-friendly website interface.
* Used Jenkins and Ansible for Continuous Integration and Continuous Deployment in multiple environments. Supported and developed tools for integration, automated testing and release management.
* Provisioned and maintaining the application infrastructure in public/private cloud by designing and implementing AWS Services such as VPC, EC2, S3, ELB, ASG, EBS, RDS, IAM, CloudFormation, Route 53, Elastic Container Service (Docker Container), CloudWatch, Cloud Formation, Elastic Beanstalk, CloudFront and CloudTrail with greater security best practices and optimal costs.
* Used JavaScript and JSON to update a portion of a webpage.
* Develop consumer-based features using Django, HTML and Test-Driven Development (TDD).
* Developed Python web services for processing JSON and interfacing with the Data layer.
* Increased the speed of pre-existing search indexes through Django ORM optimizations.
* Designed and drove experiments to form actionable recommendations. Presented to business leaders to drive decisions.
* Used Django frameworks and Python to build dynamic webpages.
* Developed tools for monitoring and notification using Python.
* Enhanced the application by using HTML and Java script for design and development.
* Implemented programming automations using Jenkins, Groovy and Ansible on Unix/Linux based OS over cloud like Docker.
* Used data structures like directories, tuples, object-oriented class-based inheritance features for making complex algorithms of networks.
* Involved in designing database Model, API's, Views using python to build an interactive web-based solution.
* Generated Python Django Forms to record data of online users.
* Implemented Data tables to add, delete, update and display patient records and policy information using PyQt.
* Implemented a module to connect and view the status of an Apache Cassandra instance using python.
* Developed MVC prototype replacement of current product with Django.
* Improved the Data Security and generated report efficiently by caching and reusing data.
* Created UI using JavaScript and HTML5/CSS3.
* Developed Custom SQL scripts, python to clean, model the data to view required claim data in developed dashboards.
* Consistently attended meetings with the client subject matter experts to acquire functional business requirements to build SQL queries that would be used in dashboards to satisfy the business's needs.
* Parsers are written in Python for extracting useful data from the design database. Creating restful web services for Catalog and Pricing with Django MVT and MySQL.
* Used third party jQuery-based plug-ins like jQuery UI, Data tables etc. Used SOAP UI Pro to test web service (REST/SOAPUI) changes.

**Environment:** Python 3.4/2.7, Django 1.9, Python scripting, Ansible, Google App Engine, NoSQL, MongoDB, MySQL, Linux/ Unix OS, Ajax, Soap, Rest, jQuery, JavaScript

**Northern Trust, Chicago, IL October 2016 – January 2018**

**Role: Python Developer Responsibilities:**

* Participated in the development of application architecture and blueprints to define application components, platforms, interfaces, and development tools.
* Used Django configuration to manage URLs and application parameters.
* Worked on Python Open stack API's
* Used Python and Pandas library, built data analysis graph for documentation and record.
* Worked with Blender script, built add-on and customization of blender interface.
* Used SPSS tool for statistical programming and computational techniques for large data sets and quantitative analysis.
* Using Numerical equation, built application and do 2D- finite Element analysis using python language
* Used Django database APIs to access database objects.
* Generated graphical reports using python package NumPy and Matplotlib.
* Representation of the system in hierarchy form by defining the components, subcomponents using Python and developed set of library functions over the system based on the user needs.
* Development of Python APIs to dump the array structures in the Processor at the failure point for debugging.
* Extracted the actual data of HTML format and predicted raw data; interpreted and stored predicted one in well- organized JSON files.
* Wrote programs to parse excel file and process many user data with data validations.
* Used Python and Django to interface with the jQuery UI and manage the storage and deletion of content.
* Built enterprise-wide DNS historical data trending analysis tools in Go (Golang), Languages with REST API for user queries as microservice.
* Wrote Python scripts to parse JSON documents and load the data in database.
* Responsible for setting up Python REST API framework using Django.
* Used jQuery and Ajax calls for transmitting JSON data objects between frontend and controllers.
* Exported/Imported data between different data sources using SQL Server Management Studio.
* Worked on development of SQL and stored procedures on MYSQL.
* Utilized Agile process and JIRA issue management to track sprint cycles.
* Used decorators, list comprehensions, functional programming, unit tests, multiple staging environments, and global team remote collaboration.

**Environment:** Python, Django, Pandas, XML, XHTML, AJAX, CSS, JavaScript, jQuery, GitHub, SQL, Rest API, Jira, Agile and Windows.

**Oglens, New Delhi, India June 2015 – September 2016**

**Python Developer Responsibilities:**

* Worked with various phases of the project like analysis, design, development, and testing.
* Good comprehend of Business requirement document and creation of Low-level design document
* Tested by adopting the new applications for voluminous data.
* Managed the project deployment by Ansible, GIT, Chef tool and other.
* Dealt on Database Objects, Tables, and views.
* Developed APIs for new clients and created new business logics accordingly for both scheduled and immediate transfers.
* Worked on Python Modules and Packages and Created project designs utilizing MVC architecture components.
* Produced, extensive Unit test cases and release tracker for every release.
* Developed Webpages using CSS, HTML and JavaScript's.
* Created a uniform look in the application by using style sheets.
* Resource providers to support automation through Jenkins.
* Extensive coding using several Python Modules and controls to rapidly build application.
* Used Python Data structures like lists, dictionaries, and tuples.
* Experienced in working with complicated List comprehensions, generators, lambda functions and various built-in functions like map, filter etc.
* Used subversion for version controlling.
* Resolved performance related issues using efficient coding.
* Query Optimization through SQL server tools for quick response time
* Provide support during developing phase by coordinating with production field.
* Worked with various bugs fixing issues.

**Environment:** Python, SQL, Linux, Chef, Jenkins, HTML, JavaScript, MVC pattern, MS SQL server.