**AKHIL**

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 **Sr Python Developer**

**PROFESSIONAL SUMMARY**

* Around 10 years of experience as a Python Developer in Design, Development, Implementation of Python, Django, Flask, Pyramid and client-server technologies-based applications, RESTful services, AWS and SQL.
* Experience in all phases of Software Development Life Cycle Process across various workflows (Requirement study, Analysis, Design, Coding, Testing, Deployment and Maintenance) in Web & Client/Server application development.
* Extensive experience in developing web applications using Python, Django, Flask, Pyramid, Sanicframeworksand with several python libraries including beautiful soup, Twisted, NumPy, matplotlib, SciPy, PyQt, Scapy, SQL Alchemy, Boto, logging, Nose, Blaze, Hug.
* Good experience in developing web applications implementing MVT architecture using Django, Flask, web application frameworks, with good understanding of Django ORM and SQL Alchemy.
* Hands-on experience with industry-standard IDEs like PyCharm, Sublime, Emacs, Eclipse, NetBeans, IntelliJ, and TOAD.
* Extensive experience in developing applications by implementation of web based and client/server application using HTML, Bootstrap, PHP, CSS, JavaScript, Bootstrap, D3.js.
* Good experience in Shell Scripting, Oracle RDBMS, SQL Server, UNIX and Linux.
* Good knowledge of TCP/IP, UDP, HTTP, HTTPS, SSH and SSL protocols.
* Expert at version control systems like Git, SVN and CVS, Migrated repos from SVN to GitHub.
* Experienced in requirement gathering, use case development, Business Process flow, Business Process Modeling: extensively used UML to develop various use cases, class diagrams and sequence diagrams.
* Proficient in writing SQL Queries, Stored procedures, functions, packages, tables, views, triggers using relational databases like Oracle, MySQL and MSSQL Server.
* Experience in data analysis and machine learning techniques with hands-on-experience on various python libraries like NumPy/Pandas/SciPy.
* Experience in building productionized data ingestion and processing pipelines using Spark, and Scala.
* Experience in migrating applications to the AWS cloud and involved in DevOps processes for build and deploy systems.
* Experience in building frameworks and automating complex workflows using Python for Test Automation.
* Proficient in writing SQL Queries, Stored procedures, functions, packages, tables, views, triggers using relational databases like Oracle, MySQL and MSSQL Server.
* Experienced with databases using ORMs/DOMs for integrating with MySQL, Postgres, MongoDB and SQLite. Also, experienced with writing custom queries through database connectors.
* Good Experience in Linux Bash scripting and following PEP Guidelines in Python.
* Highly motivated, quality minded developer, with proven ability to deliver applications against tight deadlines

**Technical Skills:**

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| --- | --- |
| Languages | Python, Java, SQL, PL/SQL. |
| IDE’s | PyCharm, Eclipse, NetBeans, Sublime, SOAP UI |
| Web Technologies/other | Django, Flask, Pyramid, AJAX, HTML5, CSS3, XML/XSD, XPath, XSLT, JavaScript, jQuery, Web Services (Soap, Restful), Amazon Webservices like EC2, S3, ELB, EBS, PyUnit. |
| Databases | SQL Server, Oracle 9i/10g/11g, MySQL, PostgreSQL, SQLite, Cassandra. |
| Frameworks | Django, Flask, Bootstrap, CherryPy, web2py, Pyramid, Robot |
| Web Servers | JBoss, BEA Web Logic, Web Sphere, Apache Tomcat |
| Version Controls | SVN, CVS, Git. |
| Operating Systems | MS Windows, Linux/Unix |
| Building & Bug Tracking Tools | ANT, MAVEN, UML, JIRA, Bugzilla |
| Methodologies | Agile, Scrum, Waterfall |

**PROFESSIONAL EXPERIENCE:**

**HCL Tech, VA Feb 2023 to Present**

**Sr Python Developer**

Responsibilities:

* Developed and maintained Python scripts for seamless data migration from on-premises systems to Snowflake cloud platform.
* Utilized an in-house data migration tool named "Lightening," built on PySpark, to optimize and automate the data migration process, enhancing efficiency and reliability.
* Orchestrated data migration tasks by configuring and scheduling jobs using Autosys, ensuring timely and accurate data transfers to the cloud.
* Leveraged "Runway," an in-house database management tool, to streamline database operations, including data validation, backup, and performance monitoring.
* Implemented continuous integration workflows with Jenkins, enabling automated testing and deployment of Python scripts, ensuring code quality and reliability.
* Collaborated with cross-functional teams to gather requirements, troubleshoot issues, and optimize data migration processes, contributing to the success of data migration projects.
* Demonstrated strong problem-solving abilities by addressing and resolving technical challenges related to data migration and Python development.
* Kept abreast of industry best practices and emerging technologies to continually enhance data migration processes and Python scripting skills.

Environment: Python 3.x, Django, Pandas, NumPy, PyCharm, Notepad++, Windows, Autosys, Linux, HTML, CSS, SQL, MySQL, IIS Web server, Rest API, Agile, Azure, SAS, COBOL, TFS, Visual Studio, TypeScript, SQL Server Management Studio, Toad for SQL, MSBI, JSON and Pivot tables, Azure Snowflake.

**UBS, NY Feb 2021 to Jan 2023 Sr Python Developer**

 Responsibilities:

* Resolving the day-to-day customer issues based on incidents.
* Analyze business requirements and envision system functionality.
* Provided System Solutions by conducting functionality workshops, comparison reports and data visualization.
* Developed Python scripts to automate the framework and SQL Scripts to ease the process of data load from external sources.
* Worked on effective research and adoption of tools and techniques that enhance the infrastructure process. (SSRS and Business Intelligence).
* Implemented Anaconda distribution of Python to simplify package management, Django Framework for Internal reports, Pandas for statistical analysis, JSON format data files to handle Data Structure, API calls for the department website and azure cloud services.
* Extensive use of Pandas data frame, NumPy, dictionaries and decorators.
* Implemented data wrangling: cleaning, transforming, merging, and reshaping data frames.
* Key role in migrating legacy infrastructure into Python 3.x, data manipulation (Staging and Operational Data layers), TFS Source code deployment and SAS Procedures for data migration.
* Conducted code reviews, developed test cases, and performed unit testing using Agile methodology.
* Designed and developed data management system using MySQL, Oracle, and Django.
* Built high end Security framework using Django and maintained internal security login framework.
* Implemented Azure Report Service – API Data Mapping and Report Data Function App.
* Successfully implemented Modular, Re usable and parameterized code and architecture.
* Worked on developing robust Algorithms and Data Structures.
* Unit testing with TypeScript – tsUnit Test
* Frequent collaboration with ETL Informatica Team for developing Data Structures.
* Worked on Django-spa to serve a create-react-app frontend that consumes a Django REST framework API.
* Implemented Test Driven Development (TDD) - Performed unit testing and created test cases to support the infrastructure and team.
* Support users by developing documentation and assisting tools & techniques.
* Worked on cloud-based technologies (Azure) and in-house built APIs for public facing data and services.
* development utilizing Python, Apache Spark, Amazon EMR, S3, AWS Lambda, and Jenkins.
* Worked on Amazon EC2 Clusters to deploy files into Buckets. Aggregate clean files in Amazon S3.
* Developed AWS Lambda functions in Python using S3 and SQS triggers to automate workflows and developed Python scripts to store and retrieve objects in AWS S3 buckets.
* Involved in Azure API Management.

Environment: Python 3.x, Anaconda Python, Django, Pandas, NumPy, Jupiter, PyCharm, Notepad++, Windows, Linux, HTML, CSS, SQL, MySQL, Informatica ETL, IIS Web server, Rest API, Agile, Azure, SAS, COBOL, TFS, AWS, Visual Studio, TypeScript, SQL Server Management Studio, Toad for SQL, MSBI, JSON and Pivot tables.

**PennyMac, Westlake Village, Los Angeles, CA July 2020 to Dec 2020**

**Sr Python Developer**

Responsibilities:

* Resolving the day-to-day customer issues based on incidents.
* Involved in building database Model, APIs, and Views utilizing Python technologies to build applications.
* Visualize and manipulate the data using various machine learning libraries like Numpy, Scipy and Pandas in Python scripts for the perfect analysis of data.
* Using Spark stream as Consumer to store in Data lakes like S3 Storage and MySQL with Dynamic partitions.\
* Mentor/train the Cloud team members in DevOps and Azure related matters
* Proven experience with CI/CD pipelines, tools such as Terraform, Jenkins, Puppet, Chocolatey, etc. for Cloud based application development and deployment to Azure.
* Practical experience with one of the IaaS public cloud offerings (MS Azure, Amazon AWS, Rackspace, or google compute engine ).
* Expert knowledge of public cloud providers (Amazon AWS/EC2, MS Azure, Google Compute Platform, OpenStack) and their technology offering, APIs and enterprise integration points
* Wrote Spark-Streaming applications to consume the data from Kafka topics and wrote processed streams to HBase and steamed data using Spark with Kafka
* Used Pyodbc to connect the python application to the SQL server driver and also used Bulk Copy Program (BCP) in the application to import and export large sets of data.
* Involved in scripting to automate actions, manipulate data, connect systems, deploy updates.
* Design and Develop pipelines and write python based PySpark scripts along with using Big Data tools to bring in TDS (transaction data stores) into Data Lake
* Create ETL (Extract, Transform, Load) design mapping sheets, data reconciliation strategy, data archival strategy- ETL framework.
* Used Pyodbc to connect the python application to the SQL server driver and also used Bulk Copy Program (BCP) in the application to import and export large sets of data.
* Experience with Python Pickling. Used the Pickles to store the data and load the pickles and merge the latest customer information into the pickles.
* Prepare Scripts in Python and Windows PowerShell for Automation of administration tasks.
* Experienced with various AWS services like EC2, VPC, EBS, AMI, SNS, SQS, SES, RDS, Cloud Watch, EMR, Cloud Trail, Auto-Scaling, Route 53, Cloud Front, IAM, S3, Lambda, Cloud Formation, Dynamo DB.
* Develop Interactive front end to visualize data from backend and represent in graphical manner to better understanding for user.

Environment: Django, Flask, REST API, Pickling, HTML5, CSS3, JavaScript, jQuery, AngularJS, ReactJS, NodeJS, MongoDB, SQL server, MySQL, Shell Scripting, Bootstrap, PSP, Pyodbc, BCP, Android, Responsive Web Design.

**Vanguard – Malvern, PA Feb 2019 to July 2020**

**Python Developer**

Responsibilities:

* Followed Agile Methodology - Involved in building database Model, APIs and Views utilizing Python, in order to build an interactive web-based solution.
* Developed views and templates using Python and created a user-friendly website interface using Django’s view controller and template language.
* Have used Python libraries like NumPy/SciPy, Pandas for market analysis and done some machine learning using Python.
* Worked on converting Hive/SQL queries into Spark transformations using Spark RDDs, Python, and OOP with Python. Worked on developing and executing shell scripts to automate the jobs.
* Created an AWS Lambda architecture to monitor AWS S3 Buckets and triggers a
* thumbnails create event whenever a user uploads a new picture.
* Involved in Python OOD code for quality, logging, monitoring, and debugging code optimization.
* Recorded the online users' data using Python Django forms and implemented test case using Pytest.
* Used PyQuery for selecting DOM elements when parsing HTML.
* Used Git version control system for collaborating with teammates and maintaining code versions.
* Used Jira to manage workflow and track progress.
* Debugging the failure issues by capturing the array and register dumps using Python scripts, traces and performing several experiments by interacting with the design team.

Environment: Python, Django, NumPy, Pandas, Pytest, PyQuery, AWS, PostgreSQL, Git, Jira, Agile, Windows.

**World Bank Group – Washington, DC Aug 2017 to Feb 2019**

**Python Developer**

Responsibilities:

* Participated in requirement gathering and analysis phase in documenting the business requirements by conducting meetings with various business users.
* Implemented Model View Control (MVC) architecture using server-side applications like Django for developing web applications.
* Developed Python based API (RESTful Web Services) to track the events and perform analysis using Django.
* Built various graphs for business decision making using Python matplotlib library.
* Used NumPy for Numerical analysis.
* Worked with Python ORM Libraries including Django ORM and have good knowledge on Project management tools. Used Apache to deploy production site.
* Worked on Python Open stack API’s used Python scripts to update content in the database and manipulate files.
* Wrote Python code embedded with JSON and XML to produce HTTP GET request, parsing HTML data from websites.
* Wrote Python code to simplify lists in Python with list comprehension and Python OOP.
* Used Python based GUI components for the front-end functionality such as selection criteria and developed a GUI for a Java script.
* Developed Python code to gather the data from and designs the solution to implement using PySpark.
* Used Python and Django to interface with the jQuery UI and manage the storage and deletion of content.
* Created Data tables utilizing PyQt to display User information and add, delete, update User records.
* Involved in development of Web Services using SOAP for sending and getting data from the external interface in the XML format.
* Developed web application using the Python and Django REST framework and deploy the API.
* Developed Business Logic using Python on Django Web Framework.
* Used Django Database APIs to access database objects.
* Developed various Python scripts to find vulnerabilities with SQL Queries by doing SQL injection, permission checks and performance analysis.
* Wrote and executed various MYSQL database queries from Python using Python-MySQL connector and MySQL db package.
* Worked in an agile development environment.
* Interfacing with supervisors, artists, systems administrators and production to ensure production deadlines are met.

Environment: Python 3.x, Django, PySpark, matplotlib, Numpy, urllib, Pandas, AJAX, jQuery, HTML5, XHTML, CSS3, JavaScript, Bootstrap, Angular.JS, SOAP, RESTful, XML, My-SQL, Agile and Windows.

**Datanomist, India June 2015 - Dec 2016**

**Python developer**

Responsibilities:

* Installing & Configuring Front End Components on Client System for Windows & Linux.
* Responsible for gathering requirements, system analysis, design, development, testing and deployment.
* Developed user interface using CSS, PHP, HTML, JavaScript and jQuery.
* Used Ansible to configure and manage the infrastructure.
* Wrote Python modules to extract/load asset data from the MySQL source database.
* Designed and developed Use-Cases, Classes and Object Diagrams using UML Rational Rose for Object Oriented Design techniques.
* Designed and implemented a dedicated MySQL database server to drive the web apps and report on daily progress.
* Developed views and templates with Python and Django view controller and templating language to create a user-friendly website interface.
* Used PyUnit, the Python unit test framework, for all Python applications.
* Involved in developing the REST Web services to expose the business methods to external services in the project.
* Worked on front end frameworks like CSS, Bootstrap for development of Web applications.
* Participated in requirement gathering and worked closely with the architect in designing and modeling.
* Developed, tested and debugged software tools for clients and internal customers of the organization.
* Automation (Ansible) and deploying on AWS environment.
* Coded test programs and evaluated existing engineering processes.
* Created a Git repository and added the project to GitHub.
* Had experience in Agile Methodologies, Scrum stories and sprints experience in Python.
* Collaborated with internal teams and external teams to solve the issues and gave feedback.
* Documented the problems and progress of the project most accurately.
* Responsible for debugging and troubleshooting the web application and also handled the day-to-day issues and fine-tuned the applications for enhanced performance.

Environment: Python, Django, HTML5/CSS, MySQL, REST Web Services, JavaScript, Eclipse, Linux, Shell Scripting, jQuery, GitHub, JIRA, GIT, AWS.