**Professional Summary**

* 10 Years of experience in Analysis, Design, Development, Testing, Customization, Bug fixes, Enhancement, Support, and Implementation of various web, stand-alone, client-server enterprise applications using Python in various domains.
* Over 6 years of experience in building technology-based applications using python, flask frameworks.
* Experienced with full software development life cycle (SDLC), architecting scalable platforms, database design and agile methodologies.
* Good Experience with databases, writing complex queries and stored procedures using SQL Expertise in workflow management tools like SQL Workbench, SQL Developer and TOAD tool for accessing the Database server.
* Experience with MPEG2-TS, and knowledge of MPEG-DASH, MP4, H264
* Knowledge on HLS.
* Experienced in Working on Big Data Integration and Analytics based on Hadoop, Spark and No - SQL databases like HBase and MongoDB.
* Experience with Amazon Web Services, AWS command line interface, and AWS data pipeline.
* Experience in developing web-based applications using Python 3.
* Good experience of software development in Python (libraries used: Beautiful Soup, NumPy, SciPy, Matplotlib, python-twitter, Pandas data frame, network, urllib2, MySQL dB for database connectivity) and IDEs - sublime text, Spyder, Pycharm, RPC frameworks.
* Experience with AWS cloud platform and its features like EC2, S3 etc.
* Good Experience in Linux Bash scripting and following PEP Guidelines in Python.
* Experience of using Python modules like NumPy, Bigdata, Machine learning for generating complex graphical data, creation of histograms, etc.
* Skilled in Object-Oriented Design and Programming using Python and C++.
* Knowledge of cloud solutions and services such as Azure and AWS
* Good knowledge of version control software – CVS, GitHub and .Net
* Excellent experience with Python development under Linux OS and Mac OS (Ubuntu, RedHat Linux).
* Experience in Database Administration, development, design, maintenance and production support of relational databases, business applications, new server setup, MySQL Server installation, upgrade, migration.

**Educational Details:**

* Master in business administration, Information Technology Management, Fox School of Business, Temple University, Philadelphia.
* Bachelor in engineering, Osmania University, India.

**Technical skills:**

**Primary Languages** Python, Java, C++, Angular.JS, React .js, node.JS.

**Python Libraries** NumPy, SciPy, Matplotlib, Pandas data frame, urllib2

**Frameworks** Node.JS, Flask, Pyramid.

**Database** MSSQL, MySQL, Mongo DB, Oracle 11g, NoSQL.

**Deployment tools** MS Azure, Amazon Web Services (EC2, S3, EBS, ELB, SES).

**Web Technologies** HTML, CSS, DHTML, XML, Java Script

**Operating systems** Windows, Mac, Fedora Linux, Red hat Linux, UNIX.

**SDLC Methods** SCRUM, Agile

**Testing Frameworks** JUnit, Pytest ROBOT

**Bug Tracking Tools** JIRA, Bugzilla

**Version Controls** SVN, GitHub, Git, Bit-Bucket

**Professional Experience**

**Client: NBCUniversal, Remote June’23-Current**

**Role: Python Developer**

**Responsibilities:**

* Worked on installation of Docker using Docker toolbox. Created custom Docker container images, tagging and pushing the images.
* Worked on creating Docker containers and Docker consoles for managing the application life cycle.
* Dockerized applications by creating Docker images from Docker file.
* Worked on CI/CD pipeline automation.
* Re-write some Hive queries to Spark SQL to reduce the overall batch time.
* Developed Python code to gather the data from HBase and designs the solution to implement using PySpark.
* Involved in Prototyping and Generating thumbnails of a video file which were backed up by the server software using ffmpeg.
* Worked on HTML5, CSS3, JavaScript, Git, REST API, Mongo DB, intelliJ IDEA.
* Design and Setting up of environment of Mongodb with shards and replicasets. (Dev/Test and Production).
* Developed SQL queries and views, and datasets for reporting and dashboard development
* Implemented IMS (IP Multimedia Sub-system) client knowledge of various multimedia video (H.263, MPEG-4, H.264) and audio (AMR) codec. Familiar with integrating 3rd party components.
* Developed a computer vision model training service (modeler) (K8s/OpenCV/Python).
* Video performance control and testing. Video/Audio streaming transport by RTP and RTCP. SIP/SDP, WebRTC, FFMPEG and PJSIP implementing and testing in Android system.
* Finished Wireless TV-MPEG Coding/Decoding and FTP for mobile system.
* Prepared test data for the positive and negative test cases by creating NON ATSC/MPEG compliant streams. Used third party tools in conjunction with Guidbuilder, Tandburge Mux, and Harmonic Encoders to generate non-standard complaint stream.
* Modified MPEG  Transport Stream tables in MPTS streams.
* Expertise in computer vision with OpenCV and PIL Library.
* Worked of various Quality control checks for data processing using Spark SQL.
* Developed integration checks around the PySpark framework for Processing of large datasets.
* Worked on migration of PySpark framework into AWS Glue for enhanced processing.
* Implemented RTP and RTCP protocols and implemented H.263, H.264 and MPEG-4 packetization/depacketization for streaming client.
* Used existing UNIX shell scripts and modified them as needed to process SAS jobs, search strings, execute permissions over directories etc.
* Extracting acting data from the database using SAS/Access, SAS SQL procedures and creating SAS data sets.
* Deploy machine learning models using Python, AWS SageMaker, Lambda, and API Gateway.
* Used the AWS -CLI to suspend on Aws Lambda function used AWS CLI to automate backup of ephemeral data stores to S3 buckets EBS.
* Build cluster on AWS environment using EMR using S3,EC2,Redshift.
* Automated image creation using GitHub actions.
* Developed ad hoc improvements for Pulse, an inhouse application.

**Client: Twilio Inc, Remote July’21 –Apr’23**

**Role: Python Developer**

**Responsibilities:**

* Experience in automating slack processes by creating Slack bots.
* Developed Google automation to automate the management of google groups.
* Developed Angular-JS components such as controllers, services, filters.
* Designed dynamic and multi browser compatible pages using HTML, JavaScript, Angular.
* Deployed application which is containerized using Docker onto a Kubernetes cluster which is managed by Amazon Elastic Container Service for Kubernetes (EKS).
* Worked on GCP services like compute engine, cloud load balancing, cloud storage, cloud SQL.
* Worked on creating interactive UI’s using one way dataflow, React Native concepts.
* Set up GCP firewall rules to allow or deny traffic to and from VM’s instances based on specific configuration.
* Extensive experience in A/V related feature (RFC2250, ATSC standards, MPEG standards, EAS standards, DIFFERENT TYPES OF Audio and Video formats such as AAC, HE AAC, MPEG-2, AC-3 est.), Video On Demand design using different server environments, Digital Video Recording (DVR), EPG guide data and update.
* Private VPN using Ubuntu, Python, Django, CherryPy, Postgres, Redis, Bootstrap, Jquery, Mongo, Fabric, Git, Tenjin, Selenium, Sphinx, Nose.
* Nodejs based Video Viewing solution using ffmpeg library and jQuery.
* Performed Data management like Merging, concatenating, interleaving of SAS datasets using MERGE, UNION and SET statements in DATA step and PROC SQL.
* Migrated an existing on-premises application to AWS.
* Used AWS services like EC2 and S3 for small data sets.
* Leverage Hadoop ecosystem to design and develop capabilities to deliver our solutions using Spark, Scala, Python.
* Developed Spark programs with Scala and applied principles of functional programming to process the complex unstructured and structured data sets.
* Developed a closed loop model with image processing and computer vision for autonomous driving car in Python, MATLAB and OpenCV.
* Worked on Python OpenStack APIS and used Numpy for numerical analysis. Developed code to make API (Put, Post, Get) calls along with parsing the Json data from the server response.
* Participated in all phases of SDLC including requirement gathering, design, analysis and testing of customer specifications, development, and deployment of the application.
* Wrote Python routines to log into the websites and fetch data for selected options. Used test driven approach for developing the application and implemented the unit tests using Python unit test framework.
* Worked on transcoding the A/V formats and down sampling the Audio levels using ffmpeg and Audacity
* Created Car Crash Analyzer with development team using Python and OpenCV
* Worked on AWS SQS to consume the data from S3 buckets. Imported the data from different sources like AWS S3, Local file system into Spark RDD.
* Developed ETL scripts in Python to get data from one database table and insert, update the resultant data to another database table.
* Designed entire front-end module and database for an interactive web application using Typescript.
* Excellent ability to learn and implement new concepts in programming.
* Designed and implement content management functionality in CI/CD and Jenkins
* Created a Git repository and added the project to GitHub.

**Client: HMS Host Corp Bethesda, MD Sep’16 – June’21**

**Role: Sr. Python Developer**

**Responsibilities:**

* Experienced in developing web-based applications using SaaS, Python, CSS, HTML, JavaScript and JQuery based in Ansible automation script, Angular.JS, React.
* Integrating the application with Ansible for building the API’s based on Ansible document.
* Worked on data migration, and data management to build high quality, automated migration systems for a large variety of workloads.
* Used Flash framework for application development.
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Deployed application which is containerized using Docker onto a Kubernetes cluster which is managed by Amazon Elastic Container Service for Kubernetes (EKS).
* Expertise in developing Macros in C/C++, templates.
* Worked on data cleaning and ensured data quality, consistency, integrity using Pandas, Numpy
* Developed and implemented test cases to Automate testing for RESTful API (Put, Post, Get, Delete, Options) along with parsing the XML/Json data from the server response.
* Implemented CI/CD process using TeamCity for global development team, allowing for dozens of code updates per hour with zero downtime.
* Expertise in Video, MPEG-2, MPEG-4, H.265 and H.264 codec technology.
* Used the AWS -CLI to suspend on Aws Lambda function used AWS CLI to automate backup of ephemeral data stores to S3 buckets EBS.
* Developed a video streaming server/client (Ffmpeg).
* Worked on MPEG2 YUV420P and YUV422P codec support with open source tools like ffmpeg, vlc and Mplayer.
* Designed and developed AWS Cloud Formation templates to create custom VPC, Subnets, NAT to ensure deployment of web applications.
* Designed entire front-end module and database for an interactive web application using Python, HTML, CSS, SQL.
* Write Test plan, Test cases for MPG2 and MPEG4 Video over 802.11AD/802.11AC wireless system for smart phone, Tablet and Notebooks.
* Responsible for implementing monitoring solutions in Ansible, Terraform, Docker, and Jenkins.
* Implemented web applications in Flask and spring frame works following MVC architecture.
* Experience in Object-Oriented Programming within networks as well as online applications
* Designed and implement content management functionality in CI/CD and Jenkins
* Extracted the data from the flat files and other RDBMS databases into staging area and populated onto Data warehouse.
* Working on SQL stored procedures that are used to access that data and deploy to SQL server database and ETL.
* Security measures that the customer implements and operates, related to the security of customer content and applications that make use of AWS Lambda services.
* Build development environment with JIRA.

**Client: HMS Host Corp Bethesda MD Oct’15 - May’16**

**Role: Python Developer**

**Responsibilities:**

* Implemented user interface guidelines and standards throughout the development and maintenance of the website using the HTML, CSS, JavaScript and JQuery, Ansible.
* Familiar with JSON based REST Web Services BigData, and Amazon Web Services (AWS).
* Experience in Infrastructure Development and Operations involving AWS Cloud platforms.
* Experienced in developing web-based applications using Python, Ansible, HTML, JavaScript and JQUERY.
* Experience with evaluating existing Elastic clusters, configuration parameters, indexing, search and query performance tuning, security, and administration.
* Performed Testing Techniques and Methodologies – understood various approaches used in testing, including Whitebox (logic driven), Blackbox (requirements driven), load testing, coverage testing and regression testing.
* Maintain build profiles in Team Foundation Server and Jenkins for CI/CD pipeline.
* Implemented CI/CD process using TeamCity for global development team, allowing for dozens of code updates per hour with zero downtime.
* Proficient in writing SQL Queries, Ansible scripts, Stored procedures, functions, Packages, tables, views, triggers using relational databases like PostgreSQL.
* Scripting for backup jobs and other SQL administered tasks.

**Client: Infosys Ltd, Hyd-India July’11-June’13**

**Role: Python Developer**

**Responsibilities:**

* Designed a GCM push notification interface using REST architecture in python.
* Performed data analysis on the user behavioral pattern for Game store app which increased application usage by 40%.
* Developed remote integration with third party platforms by using RESTful web services to make database calls for inserts, updates, and select queries.
* Developed simple user interface for record keeping using Java.
* Created test plans and automation scripts in Python using Selenium and Appium.