**Rajya Lakshmi**

**E-mail: sudheer.r@tekprosol.com**

**Contact: 609 981 8255**

**Professional Summary:**

* 10+ years of experience as a Python Developer, and a proficient coder in multiple languages and environments including Python, REST API, AWS and SQL.
* Wrote Python scripts to parse documents and load the data in a database and developed web-based applications using Python, CSS and HTML.
* Worked on applications and developed them with JSON.
* Developed and implemented complex user interfaces using ReactJS, ensuring high performance and responsiveness.
* Created and maintained reusable components and front-end libraries with ReactJS for efficient and scalable development.
* Managed application state using advanced React hooks and context API techniques.
* Integrated third-party libraries and APIs with ReactJS to enhance application functionality.
* Collaborated with UX/UI designers to implement user-friendly and visually appealing interfaces using ReactJS.
* Conducted code reviews and provided mentorship to junior developers on ReactJS best practices.
* Utilized ReactJS for building single-page applications (SPA) with dynamic routing and navigation.
* Implemented unit testing and end-to-end testing for ReactJS applications to ensure code quality and reliability.
* Optimized ReactJS applications for performance, including lazy loading, code splitting, and caching strategies.
* Participated in Agile development processes, contributing to sprint planning, daily stand-ups, and retrospectives to deliver ReactJS features on time.
* Good experience of software development in Python and IDEs: PyCharm, sublime text, Jupyter Notebook.
* Experience in writing Sub Queries, Stored Procedures, Triggers, Cursors, and Functions on MySQL and PostgreSQL databases.
* Experience in Python handling File I/O, building GUI’s with Tkinter, and performing complex calculations using NumPy, SciPy, matplotlib, and Pandas.
* on scripting using various built-ins libraries like Pandas, NumPy, PySpark, Boto3, FastAPI
* Developed data acquisitions into python using csv, datetime, request, FastAPI, file IO (OS Module). Worked with files using the IO module, developed scripts to read large volume data files including transaction data for batch processing.
* Implemented unit testing and end-to-end testing for ReactJS applications to ensure code quality and reliability.
* Optimized ReactJS applications for performance, including lazy loading, code splitting, and caching strategies.
* Participated in Agile development processes, contributing to sprint planning, daily stand-ups, and retrospectives to deliver ReactJS features on time
* Experience in implementing server-side technologies with restful API and MVC design patterns with node JS and Django framework.
* Hands-on experience in using NOSQL libraries like MongoDB, Cassandra, and Redis and relational databases like Oracle, SQLite, PostgreSQL and MYSQL databases.
* Experienced in working with various Python IDEs using PyCharm, PyScripter, Spyder, PyStudio and PyDev.
* Experience in job workflow scheduling and monitoring tools like Airflow and Autosys.
* Experience in Setup hosting on AWS EC2 instance and used Confidential SES for email delivery and hands-on experience on SCM tools like GIT, containers like Docker etc.
* Experienced on working with Docker for creating images that are deployed on AWS as Microservices and Experienced on managing the local deployments in Kubernetes and creating local cluster and deploying application containers.
* Experience with Docker containers and container orchestration systems such as Confidential ECS, Kubernetes and Docker Swarm.
* Experience with JSON based REST Web services and Confidential Web services (AWS) and Responsible for setting up Python REST API framework and spring frame work using Django.
* Strong expertise in development of web-based applications using Python, Java, HTML, XML, KML, Angular JS, CSS, DHTML, JavaScript, JSON and jQuery.
* Experience in working with Python ORM Libraries including Django ORM, SQLAlchemy.
* Experience in implementing with server side technologies with restful API and MVC design patterns with node JS and Django framework.
* Experience with ORM's such as Django, database design and normalization. Proficient skills of using PyUnit, PyTest for writing unit test cases.
* Expertise in test automation and continuous delivery of web applications, client server applications, web services/REST APIs Testing, with Python.
* Hands on experience in using NOSQL libraries like MongoDB, Cassandra, Redis and relational databases like Oracle, SQLite, PostgreSQL and MYSQL databases.
* Proficient in SQL databases MySQL, Oracle and no-SQL databases MongoDB, Cassandra, Sqlite 3.
* Proficient in Front end development experience using HTML, XML, CSS, JQuery, JSON and Javascript, CSS, Bootstrap.
* Good Experience in Amazon AWS concepts like EMR and EC2 web services which provides fast and efficient processing of Big Data.
* Proficient in using Confidential Web Services AWS. Extensive experience focusing on services like EC2, VPC, Cloud Watch, Cloud Front, Cloud Formation, IAM, S3, Confidential RDS, Elastic Cache, SNS, SQS.
* Configured AWS Identity and Access Management (IAM) Groups and Users for improved login authentication.
* Hands-on experience working in WAMP (Windows, Apache, MYSQL, and Python) and LAMP (Linux, Apache, MySQL, and Python) Architecture.
* Optimized ReactJS applications for performance, including lazy loading, code splitting, and caching strategies.
* Participated in Agile development processes, contributing to sprint planning, daily stand-ups, and retrospectives to deliver ReactJS features on time.
* Experienced in Requirement gathering, Use Case development, Business Process flow, and Business Process Modeling.
* Worked on designing and writing Software Requirement Specification (SRS) documents and other technical documents.
* Experience working in various Software Development Methodologies like Waterfall, Agile SCRUM, and TDD.
* Expertise in integrated environments for java such as Eclipse, MyEclipse, RAD, NetBeans, ClearCase, and VSS.
* Cleaned data and processed third-party spending data into maneuverable deliverables within specific formats with Excel macros and Python libraries.

**Technical Skills:**

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| --- | --- |
| Language and Framework | Python, Django, Flask, Jupyter, Sagemaker Numpy, Scipy, Pandas, Requests, Boto3, R, OpenCV, Tensorflow, CUDA, Pytorch, GPU, Keras, Tesseract, Google vision api |
| API Development | Rest API, Micro-service API, Fast API, AWS lambda |
| Cloud Servers | AWS, Azure, GCP, EC2, S3 bucket, CI/CD, ETL, Docker, Cosmoss, Kubernetes, Terraform, Jira, Bitbucket |
| Technical Procedural Skills | OCR, image processing, document processing Object detection, tracking, segmentation, Pose estimation, Video processing and analytics Data analytics and processing, data classification Deep learning and machine learning, Natural language processing Forecasting and prediction |
| Database Management | SQL: MySQL, PostgreSQL, SQLite3, NoSQL: MongoDB, DynamoDB Tableau, Snowflake |
| Data Structure | Json, , CSV, TXT, Power shell, Redis, yaml, shell scripting |
| Environment | Linux, MacOS, Windows |
| Front-End | React, Angular, JavaScript, CSS, HTML |

**Professional Experience:**

**Client: BNYM, NY Apr 2023 - Present**

**Role: Sr Python Developer**

**Responsibilities:**

* Worked extensively on AWS Components such as Elastic Map Reduce (EMR), Athena, and Snowflake.
* Developed a Python Script to load the CSV files into the S3 buckets and created AWS S3buckets, performed folder management in each bucket, and managed logs and objects within each bucket.
* Use Python unit and functional testing modules such as unit test, unittest2, mock, and custom frameworks in-line with Agile Software Development methodologies.
* Worked with Amazon Web Services (AWS) using EC2 for hosting and Elastic Map reduce (EMR) for data processing with S3 as a storage mechanism.
* Querying data from MongoDB and using them as input for the machine learning models Using AWS for application deployment and configuration.
* Worked with the data science team and have developed step function with the connected lambda and restful APIs.
* Worked with FastAPI library to retrieve data from webpage based on the defined URL, API router using decorators and BaseModel used for Inputs.
* Implemented state management using React hooks and context API to manage application state efficiently.
* Integrated RESTful APIs with ReactJS to fetch and display dynamic data.
* Collaborated with backend developers to design and implement RESTful APIs for seamless integration with ReactJS front-end.
* Debugged and resolved issues in ReactJS applications to ensure smooth user experience.
* Participated in Agile development processes, including sprint planning, daily stand-ups, and retrospectives, to deliver ReactJS features on time.
* Python, Django, and flask framework with NoSQL database were used and all APIs were deployed in AWS servers (JavaScript, HTML and CSS were used in API testing and environment development).
* Performed troubleshooting, fixed and deployed many Python bug fixes of the two main applications that were a main source of data for both customers and internal customer service team.
* Perform troubleshooting, fixed and deployed many Python bug fixes of the two main applications that were a main source of data for both customers and internal customer service team.
* Write Python scripts to parse JSON documents and load the data in database.
* Generating various capacity planning reports (graphical) using Python packages like Numpy, matplotlib.
* Analyzing various logs that are been generating and predicting/forecasting next occurrence of event with various Python libraries.
* Developed single page application by using Angular JS backed by MongoDB and NodeJS.
* Design and maintain databases using Python and developed Python based API (RESTful Web Service) using Flask, SQL Alchemy and PostgreSQL.
* Manage code versioning with GitHub, Bit Bucket and deployment to staging and production servers and implement MVC architecture in developing the web application with the help of Django framework.
* Use Celery as task queue and RabbitMQ, Redis as messaging broker to execute asynchronous tasks.
* Design and manage API system deployment using fast http server and Amazon AWS architecture.
* Optimized ReactJS applications for maximum speed and scalability.
* Used React Router for developing single-page applications (SPA) with dynamic routing.
* Applied best practices in ReactJS development, including code reviews, unit testing, and continuous integration.
* Worked with Redux for state management in complex ReactJS applications.
* Implemented responsive design using CSS frameworks like Bootstrap and Material-UI in ReactJS projects.
* Develop remote integration with third party platforms by using RESTful web services and Successful implementation of Apache Spark and Spark Streaming applications for large scale data.
* Involved in development of Web Services using SOAP for sending and getting data from the external interface in the XML format.
* Export Test case Scripts and modified the selenium scripts and executed in Selenium environment.
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Designed the real-time analytics and ingestion platform using Storm and Kafka. Wrote Storm topology to accept the events from Kafka producer and emit into Cassandra DB.
* Implemented AWS solutions using E2C, S3, RDS, EBS, Elastic Load Balancer, and Auto scaling groups, Optimized volumes and EC2 instances.
* Developed Python scripts to monitor health of Mongo databases and perform ad-hoc backups using Mongo dump and Mongo restore.
* Developed custom ReactJS components to meet specific project requirements.
* Ensured cross-browser compatibility and optimized ReactJS applications for various devices.
* Conducted performance testing and optimization for ReactJS applications to enhance user experience.

**Environment**: Python, PyUnit, Pandas, HTML5, DHTML, FAST API, AJAX, CSS3, JavaScript, Django, Jinja2, Jenkins, Amazon Web Services (AWS), JSON, REST, Angular.js, Bootstrap, Node.js, Git, JIRA, Perl, SQL, Agile, windows and Linux

**Client: DTCC. Tampa, FL June 2022 – Mar 2023**

**Role: Sr Python Developer**

**Responsibilities:**

* Work on S3 bucket, DynamoDB, EC2 servers, nginx, Apache, tableau reporting, real time communication, financial processing and trading processing, risk and strategy management skills.
* Part of team implementing REST API's in Python using micro-framework like Flask with SQL Alchemy.
* Wrote Python code to simplify lists in Python with list comprehension and Python OOP. Worked with POSTMAN for API testing. Developed REST APIs, and created User Model for application.
* Created database tables and implemented SQL Stored Procedures, triggers, and complex queries in MYSQL.
* Implemented Micro Services based Cloud Architecture on AWS Platform and Cloud Foundry.
* Design and documentation of RESTful APIs for collection and retrieval of high volume IOT telemetry data.
* Developed remote integration with third party platforms by using RESTful web services.
* Wrote Python code embedded with JSON and to produce HTTP GET request, parsing HTML data from websites.
* Developed a fully automated continuous integration system using Git, Gerrit, Jenkins, MySQL and custom tools developed in Python.
* Worked with SQOOP jobs to import the data from RDBMS and used various optimization techniques to optimize Hive, Pig and SQOOP.
* Develop and Execute scripts on AWS Lambda to generate AWS CloudFormation template.
* Reviewed codes in Shell Script, Pearl, Python, Javascript, AWK, API C++, PL/SQL & T-SQL; created subprograms, procedures and functions, DB triggers, cursors and optimization techniques for T-SQL.
* Designed a python script to load transformed data into cloud services (AWS, Azure, and GCP).
* Wrote Python scripts to parse XML documents and load the data in database.
* Parsers written in Python for extracting useful data from the design data base.
* Development of Python APIs to dump the array structures in the Processor at the failure point for debugging.
* Engineered a data processing pipeline with GCP, API, CSS, API & OpenSlide APIs to pre-process large-scale
* Utilized STL and C++ algorithms to achieve optimal design efficiency.
* Design and develop solutions using C, C++, Multi-Threaded, Shell Scripting.
* Wrote Python Scripts to handle REST API's to retrieve Network data from data centers.
* Involved in development of Web Services using SOAP for sending and getting data from the external interface in the XML format.
* Designed Cloud Infrastructure as a Service environment using open-source technology OpenStack to enable portability of cloud services across hybrid cloud environments.
* Built Framework to retrieve Data inputs from WebForms and loaded into Database using Python – FAST API, Open Search, Indexing, DynamoDB Streams
* Reviewed and worked on the implementation of change requests raised by the client. Involved in complete Agile/SDLC - Requirement Analysis, Development, System and Integration Testing.
* Directly worked with Business Analysts and SMEs to gather requirements from the customer and transformed them into functional and technical specifications.

**Environment**: Python, Django, JQuery, MySQL, Oracle, Linux, Eclipse, Shell Scripting, fast API, HTML, XHTML, SVN, CSS, AJAX, Bugzilla, JavaScript, Apache Web Server, Apache spark, Git, Jenkins.

**Client: Chater Communications. Charlotte, NC Aug 2018 – Oct 2021**

**Role: Sr Python Developer**

**Responsibilities:**

* Familiar with NumPy and Matplotlib.
* Good experience in front-end technologies, such as HTML5, CSS3 and good UI development experience.
* Generated graphs for business decision-making using Python Matplotlib library.
* Database knowledge and python interaction with databases.
* Good experience in core python object-oriented programming
* Responsible in creating a database and its validations and authorization with MySQL.
* Created database using MySQL, wrote server queries to extract data from database.
* Experience in working with various Python Integrated Development Environments like Net Beans, PyCharm, PyScripter, Spyder, PyStudio, PyDev and Sublime Text.
* Experience with Design, code and debug operations, reporting, data analysis and web applications utilizing Python.
* Experienced in creating Web Services with Python programming language, Web development utilizing HTML4/5, CSS/CSS3, JavaScript, jQuery, AngularJS, AJAX, XML and JSON.
* Strong experience in Bigdata, Bigdata Integration and Analytics technologies including Apache Spark, Hadoop, Kafka, Storm.
* Excellent interpersonal and communication skills, the ability to provide solutions from a functional and technical perspective, meet deadlines, quickly build client rapport and be a team player.
* Proficient in writing unit testing code using Unit Test/PyTest and integrating the test code with the build process.
* Experience with Django, a high-level Python Web framework.

**Environment**: Python, Django, Shell Scripting, Angular JS, JavaScript, Node JS, NumPy, matplotlib, SciPy, Pandas, PyTables, MongoDB, AWS EC2, Maven, GITHUB, Jira, Agile, Windows.

**IMImobile, Hyderabad, India May 2015 - Nov 2017**

**Title: Data Analyst**

1. Involved in all phases of SDLC, with timely Delivery against aggressive deadlines.
2. Extensively involved in the Onsite-Offshore model, where need to hold meetings on a daily basis, as were following agile methodology.
3. Extensively used Informatica Power center for extraction, transformation and loading process.
4. Extensively analyzed several ETL Mappings developed using Informatica Power center.
5. Evaluated current data warehouse/ETL environment for usage in spend analytics solution deployment and provided gap assessment.
6. Worked with SQL queries for data verification and validation and used ETL tool for developing the data warehouse.
7. Worked with ETL Source System and Target System for creating ETL Mapping Document.
8. Analyzed different sources such as Flat files, Legacy Flat Files, SQL server 2008 and Oracle to load into the Teradata data warehouse.
9. Created PL/SQL inline code as part of extract and loading required reporting data elements into data warehouse tables.
10. Tuned the complex SQL queries for better performance by eliminating various performance bottlenecks.
11. Worked on Cognos reports and Scheduled Daily and Monthly basis.
12. Applied Page breaks settings on Cognos reports.
13. Worked on Web Services, where the real-time requests come in and made sure the response is being sent back utilizing Soap UI.
14. Analyzed several UNIX shell scripting for File validation and also PL/SQL programming.
15. Validated Web Service including request response validation using SOAP UI.
16. Used UNIX to verify the session log files for error and warning details.
17. Written several SQL statements to confirm successful data transfers between source and target.

**Software & Tools:** Informatica Power center, Cognos, SOAP UI, UNIX, Teradata, XML Files, XSD, XML Spy, Oracle DB, HP ALM, Soap UI, Rest API, RDBMS, Web services.

**Knoah Solutions, Hyderabad, India Jun 2014 – Apr 2015**

**Title: Data Analyst**

1. Worked on complete SDLC from Extraction, Transformation and Loading of data using Informatica.
2. Worked in agile technology with Scrum.
3. Involved in the error checking and analysis of the ETL procedures and programs Informatica session log.
4. Analyzed the ETL Informatica Power center mappings and other ETL Processes.
5. Worked on Teradata SQL Assistant querying the source/target tables to validate the BTEQ scripts.
6. Validated the data transformations developed by DB2 stored procedures and Informatica Power center.
7. Involved in extensive DATA validation using SQL queries.
8. Used SQL for Querying the DB2 database in UNIX environment.
9. Worked on exporting data to flat files using Teradata Fast Export.
10. Generated reports using Business Objects Report Designer.
11. Responsible for analyzing the Business Reports developed by Business Objects.
12. Analyzed the reports using Business Objects functionalities like Queries, Slice and Dice, Drill Down, Cross Tab, Master Detail and Formulae etc.
13. Involved in testing the XML files and checked whether the data is parsed and loaded to staging tables.
14. Actively participated in all phases of testing life cycle including document reviews, inspections, and project status meetings.

**Software & Tools:** Informatica DVO, Business Objects, Teradata, UNIX, XML Files, XSD, XML Spy, Oracle DB, SOAP UI, Rest API, Agile Scrum, HP ALM, Web service.

**EDUCATION**

Master’s in computer science, Wichita State University, Wichita, KS **Jan 2022 – Dec 2022**

Bachelor’s in computer science, CIET, India **Aug 2010 – Apr 2014**

**CERTIFICATIONS**

2X Python certified **Mar 2023**