**Name: Vijay Kumar E-mail: vijay.pythondev6@gmail.com**

**Python Developer PH No: +1 (978) 496-9149**

**PROFESSIONAL SUMMARY:**

* With over 9 years of experience as a Python Developer, I have expertise in multiple programming languages and have worked on the design, development, and implementation of Python-based applications using technologies such as Web Socket, Django, Flask, Pyramid, and client-server architectures. I am also proficient in RESTful services, AWS, C, C++, JAVA, and SQL.
* I have developed web-based applications using Python, Django, PHP, Angular JS, VB, C++, XML, CSS, HTML, DHTML, JavaScript, and jQuery. I am experienced in Agile Software Methodology and have actively participated in each phase of the Software Development Life Cycle (SDLC).
* My hands-on experience includes Python web application development using Django and Serverless frameworks. I have worked with various Integrated Development Environments (IDEs) such as NetBeans, PyDev, PyCharm, and Sublime Text. I adhere to Python best practices (PEP8) and have good knowledge of the AWS Cloud platform and its services, including S3 buckets, Lambda, API Gateways, DynamoDB, SQS, SNS, Batch Jobs, Event Bridge Rule, CloudWatch, and AWS Config.
* I have expertise in MVW frameworks like Django, Angular JS, JavaScript, jQuery, Node JS, and JSON. Additionally, I have worked with Automation tools like QTP/UFT and Selenium IDE. My experience also includes working with popular Python packages such as NumPy, SQL Alchemy, Matplotlib, Beautiful Soup, PySide, SciPy, and PyTables. I have worked with both relational databases like MySQL, PostgreSQL, and non-relational databases like MongoDB.
* In-depth knowledge of object-oriented programming, multi-threading, and collections concepts in Python. I have utilized the Pandas library for statistical analysis and have a strong understanding of both traditional statistical modeling and machine learning techniques, including regression and clustering algorithms.
* I have developed web applications and RESTful services and APIs using Python frameworks like Flask, Django, and Pyramid. I have designed and managed API system deployments using fast HTTP servers and Amazon AWS architecture. My experience also includes working with relational and non-relational databases such as MySQL, Cassandra, and MongoDB.
* I have built frameworks and automated complex workflows using Python for test automation. I have migrated applications to the AWS cloud and have been involved in DevOps processes for building and deploying systems. I have worked with container systems like Docker and container orchestration tools like EC2 Container Service and Kubernetes, as well as Terraform.
* Experience in the Build & Deployment phase and usage of Continuous Integration (CI/CD) tools, build configuration, change history for releases, Maintenance of build system, automation test processes, managing, configuring, and maintaining source control management systems.
* Experienced in Agile Methodologies, Scrum stories, and sprints experience in a Python-based environment, along with data analytics, data wrangling, and Excel data extracts.
* Configure backup, alerts, repairs, and monitoring of Cassandra clusters, in conjunction with custom scripts.
* Excellent Interpersonal and analytical skills and a highly motivated team player with the ability to work independently.

**PROFESSIONAL EXPERIENCE:**

**Client: CIGNA Healthcare February 2023 to Present**

**Role: AWS Python Developer**

**Description**:

Cigna Healthcare is the health benefits provider that advocates for better health through every stage of life. The Company guides its customers through the healthcare system, empowering them with the information and insight they need to make the best choices for improving their health and vitality.

**Responsibilities:**

* Gathered requirements, performed system analysis, and designed, developed, tested, and deployed applications in accordance with the SDLC process.
* Collaborated with business partners, business analysts, and product owners to understand requirements and develop scalable distributed data solutions.
* Utilized Python and Django for XML processing, data exchange, and business logic implementation. Developed database models, views, and APIs for interactive web-based solutions.
* Created user-friendly website interfaces by developing views and templates using Python and template languages.
* Leveraged Amazon Web Services (AWS) for efficient storage and fast access.
* Developed AWS Lambda functions in Python with S3 and SQS triggers for workflow automation. Created Python scripts to store and retrieve objects in AWS S3 buckets.
* Managed S3 bucket creation, policies, IAM role-based policies, and user access levels.
* Worked with AWS services such as SQS and SNS for automated email and message delivery using the boto3 library.
* Configured Event Bridge Rules for scheduled cron jobs and batch job triggering using SQS.
* Developed Python scripts using the boto3 API to retrieve messages from various events.
* Loaded data files from URLs to Amazon S3 buckets.
* Imported and exported databases using SQL Server Integration Services (SSIS) and Data Transformation Services (DTS Packages).
* Implemented test cases using the PyTest framework and performed bug fixing.
* Used Postman to test APIs by sending requests to the web server and validating responses.
* Provided production support by creating high-priority incident tickets and working with the team to resolve incidents.
* Strong grounding in CI/CD concepts and experience with Jenkins, Docker, and Terraform.
* Solid understanding of Service Orientated Architecture and API design.
* Participated in code reviews and handled day-to-day issues while enhancing applications.
* Worked in an Agile SCRUM environment, participating in team standups, project planning, and bug review meetings.
* Utilized version control systems like Git for continuous integration and JIRA for bug tracking and project management.

**Environment**: Python 3.9, Pandas, Java, JQuery, MySQL, PostgreSQL, Linux, GitHub, Confluence Page, AWS Components; S3 buckets, API Gateway, AWS Lambda, CloudWatch, OpenSearch, DynamoDB, AWS batch job, SQS, Event Bridge Rule,

**Client: Two Sigma May 2022 to January 2023**

**Role: Python Data Engineer**

**Description**:

Two Sigma Investments is a New York City-based hedge fund that uses a variety of technological methods, including artificial intelligence, machine learning, and distributed computing, for its trading strategies.

**Responsibilities:**

* Analyzed, developed, managed, and implemented various standalone and client-server enterprise applications using Python. Mapped requirements to systems.
* Utilized Python, R, SQL, Microsoft Excel, PySpark, and Spark SQL for data mining, data cleansing, and machine learning.
* Developed ETL processes using Python scripts to extract, transform, and load data, as well as perform Python unit tests.
* Updated and maintained Python unit tests to ensure accuracy and usefulness.
* Wrote Python scripts for extracting data from JSON files.
* Troubleshooted and deployed bug fixes for the main Python applications.
* Created and scheduled jobs for production using AWS Job Scheduler.
* Developed machine learning models including classification, regression, clustering, and decision trees.
* Utilized AWS Data Pipeline for data extraction, transformation, and loading from various data sources, creating business decision-making graphs using Python's Matplotlib library.
* Implemented data processing tasks using PySpark, including reading data from external sources, merging data, performing data enrichment, and loading into target destinations.
* Leveraged Pandas, NumPy, Seaborn, Tensorflow, Matplotlib, and Sci-kit-learn in Python for data pipelines and various machine learning algorithms.
* Collaborated with other departments to gather data needs and requirements for experiments.
* Worked closely with data scientists to understand data requirements.
* Worked with SQLite, MySQL, and SQL databases for data preprocessing, analysis, and machine learning.
* Developed web services like REST and Restful using Python.
* Participated in the requirement gathering and analysis phase, documenting business requirements for a data platform.
* Experience with cloud versioning technologies like GitHub.
* Possess excellent interpersonal and communication skills, efficient time management and organization skills, ability to handle multiple tasks, and work well in a team environment.

**Environment**: Python, Pandas, NumPy, Seaborn, Matplotlib, Tensorflow, MySQL, AWS Services, MongoDB, DynamoDB, ETL.

**Client: Bank of America January 2020 to August 2021**

**Role: Python Developer/Data Scientist**

**Description**:

The Bank of America Corporation is an American multinational investment bank and financial services holding company headquartered in Charlotte, North Carolina. The bank was founded in San Francisco and took its present form when the Nation’s Bank of Charlotte acquired it in 1998.

**Responsibilities:**

* Developed frontend and backend modules using Python on the Django Web Framework.
* Created Python and Bash tools to enhance the efficiency of call center application systems and operations, performed data conversion, implemented AMQP/RabbitMQ, REST, JSON, and CRUD scripts for API integration.
* Utilized Django framework for application development.
* Developed PL/SQL triggers and master tables for automatic creation of primary keys.
* Used DevOps in Windows-based systems.
* Assisted in cost reduction and optimization of supplier selection for CRM applications.
* Gathered and cleaned credit risk-related data, including credit history, financial statements, loan application details, etc.
* Worked with Python libraries such as Numpy and Matplotlib.
* Proficient in object-oriented programming and automation script development.
* Designed and developed the UI of websites using HTML, XHTML, and JavaScript.
* Worked with AngularJS and ReactJS features such as Two-way Binding, Custom Directives, Controllers, Filters, Services, and Project Architecture.
* Familiar with server-side templating languages like Jinja2.
* Utilized SQL, Numpy, Pandas, and Spark for data analysis and model building.
* Used Spark and Spark SQL to read parquet data and create tables in Hive using Scala API.
* Implemented Spark using Scala and Spark SQL for faster data testing and processing.
* Developed predictive models for credit risk using data preprocessing, exploration, feature engineering, model development, validation, deployment, and maintenance.
* Utilized the BeautifulSoup Python library for web scraping.
* Extracted, transformed, and loaded data from various data sources using SSIS.
* Proficient in high-level programming languages like Go Lang and Python.
* Experience with eBPF for system-level programming.
* Knowledge of real-time data processing and event-driven programming.
* Developed LoadRunner scripts on Web HTTP protocol.
* Designed and tested tax applications in the Hedge Fund, Private Equity, and Entity Structure.
* Developed architecture for end-to-end solutions for hedge fund accounting systems.
* Wrote Python scripts to parse XML documents and load data into databases.
* Designed and developed a data management system using MySQL.
* Deployed models in Pyspark and created Pyspark functions for each SAS Macro.
* Built graphs for business decision-making using Python's Matplotlib library.
* Involved in cross-functional development for embedded systems.
* Developed various machine learning algorithms, including linear regression, logistic regression, decision tree, random forest, and clustering analysis.
* Handled large databases and performed complex data manipulations.
* Executed projects using Agile methodology and assigned tasks to team members.
* Collaborated with internal teams to incorporate end-user feedback into solutions.
* Created a framework using Plotly, Dash, and Flask for data visualization and trend analysis.
* Resolved ongoing problems and documented project progress.
* Dealt with data ambiguity and implemented lazy evaluation in Pyspark for code optimization.
* Conducted customer behavior analysis and customer value discovery using RMF analysis and clustering algorithms.
* Utilized Python (NumPy, SciPy, pandas, sci-kit-learn, seaborn) and Spark (PySpark, MLib) for model development and analytics purposes.

**Environment**: Python, Django, GoLang, Pandas, Java, JQuery, MySQL, Linux, Shell Scripting, Apache, MongoDB, ETL.

**Client CEVA LOGISTICS February 2018 to December 2019**

**Role: Python Developer**

**Description:**

## CEVA Logistics makes business flow. As one of the world’s leading non-asset-based supply chain management companies, we design and implement industry-leading solutions in both freight management and contract logistics. The culture of Operational Excellence is embedded in everything we do across our operations. We have developed robust programs applying it in our Freight and Contract Logistics operations around the globe.

**Responsibilities:**

* Developed the full backend system using Python and Django, including Web Sockets for real-time data delivery to web applications.
* Utilized object-relational mapping (ORM) to automate data transfer between relational databases and objects.
* Developed applications for continuous trend analysis using Python's pandas data frame and line plots.
* Implemented programming using object-oriented concepts and Python modules such as JSON, NumPy, Pandas, and Pickle.
* Designed and implemented live monitoring dashboards for Tableau Server and visualization users.
* Integrated Django applications with Nginx proxy using WSGI to run Python web applications.
* Proficient in Python ORM libraries such as Django's ORM and SQLAlchemy.
* Developed data visualization applications for exploratory data analysis using Python's Matplotlib library.
* Used Plotly to create pictorial representations of data for better understanding.
* Created views and forms for claims handling using Django's class-based view.
* Proficient in ORM programming for data conversion in OOP languages.
* Developed scripts for web HTTP/HTML and Siebel web protocol.
* Built database mapping classes using Django models and developed APIs for web scraping and data processing using Beautiful Soup API/XML.
* Developed business logic using Python on the Django Web Framework.
* Built REST APIs using Django for JSON data transfer to user interfaces.
* Led offshore IT developers throughout the development phases.
* Developed a real-time system proof of concept using Node.js, AngularJS, and ReactJS.
* Wrote Python routines to log into websites and fetch data.
* Achieved final acceptance of project deliverables within budget and schedule.
* Developed frontend and backend modules using Python on the Django Web Framework.
* Used Django ORM to query and manage AWS MySQL RDS instances.
* Conducted data profiling and data quality review for existing and incoming data.
* Experienced with bug tracking and version control tools like Bugzilla and SVN.
* Developed private API endpoints for internal consumption using AWS API Gateway and Lambda.
* Used Jenkins as a continuous integration server for running automated test suites.
* Utilized Golang API/SDKs for backend development.
* Wrote Python modules to view and connect to Apache Cassandra instances.
* Managed and administered remote UNIX systems.
* Designed and developed serverless microservice ETL applications using AWS Lambda and S3 with AWS CDK.
* Created data access using SQL and PL/SQL stored procedures.
* Used Git version control for source code management.
* Worked with various Python libraries for developing machine learning algorithms and utilized algorithms such as linear regression, multivariate regression, naïve Bayes, random forests, K-Means, and KNN for data analysis.

**Environment**: Python 3.4/2.7, Django 1.7, JSON, JavaScript, TypeScript, AWS Lamda, RESTful web service, Git Lab, Python libraries like Matplotlib, and pandas.

**Client: Arrow Electronics January 2016 to December 2017**

**Role: Python Developer**

**Description:**

Arrow Electronics is an American Fortune 500 company headquartered in Centennial, Colorado. The company specializes in the distribution and value-added services relating to electronic components and computer products

**Responsibilities:**

* Worked with stakeholders to gather requirements and create high-level design documents.
* Used Python libraries such as NumPy, SciPy, and Pandas for market analysis and machine learning.
* Profiled Python code for optimization and memory management.
* Developed web service backend using Python (CherryPy, Django, SQLAlchemy).
* Developed frontend and backend modules using Python on the Django Web Framework.
* Implemented Docker containers and load balancing with Nginx for continuous delivery.
* Created Docker containers from existing Linux containers and AMIs.
* Experienced in embedded software development for electronic modules.
* Proficient with AWS cloud platform and services such as EC2, S3, SNS, and CloudWatch.
* Worked on SQL and stored procedure development on MySQL.
* Designed and developed horizontally scalable APIs using Python Flask.
* Developed dashboards using Tableau Desktop, Bokeh, and D3.js.
* Gathered semi-structured and relational data from various sources using AWS Glue.
* Developed data processing tasks using PySpark for data enrichment and loading.
* Utilized Python libraries (Pandas, Numpy, Seaborn, Matplotlib) for data analysis and modeling.
* Collaborated with other departments to understand data requirements for experiments.
* Conducted data analysis, preprocessing, and machine learning on structured and unstructured data.
* Developed web services for RESTful APIs using Python.
* Participated in the requirement gathering and analysis phase of projects.
* Utilized Git version control for source code management.
* Worked with SQL and PL/SQL stored procedures for data management.
* Built various graphs for business decision-making using Python's Matplotlib library.
* Involved in cross-functional development for embedded systems.
* Developed machine learning algorithms such as linear regression, logistic regression, decision trees, and random forests.
* Handled large databases for complex data manipulations.
* Executed projects using Agile methodology and assigned tasks to team members.
* Collaborated with internal teams to incorporate end-user feedback into solutions.
* Created frameworks using Plotly, Dash, and Flask for data visualization.
* Resolved ongoing problems and documented project progress.
* Implemented lazy evaluation in PySpark for code optimization.
* Conducted customer behavior analysis and segmentation using RMF analysis and clustering algorithms.
* Used Python (NumPy, SciPy, Pandas, sci-kit-learn, seaborn) and Spark (PySpark, MLib) for analytics and model development.

**Environment**: Python 2.7, NumPy, SciPy, Dockers, Pandas, JSON, Oracle DB, MySQL, DB2, PL/SQL, Linux, HTML, XHTML, CSS, JavaScript, Apache Web Server, Django 1.4.

**Client: BCBS June 2014 to November 2015**

**Role: Python Developer/Data Analyst**

**Description:**

Blue Cross Blue Shield Association is a federation of 35 separate United States health insurance companies that provide health insurance in the United States to more than 106 million people

**Responsibilities:**

* Worked on requirement gathering and high-level design.
* Developed web applications using HTML, CSS, and JavaScript.
* Converted Visual Basic applications to Python and MS SQL.
* Used Python scripts to update database content and manipulate files.
* Wrote programs to parse Excel files and perform data processing.
* Implemented Thales theorem for encryption and decryption of ISO standard messages in Python.
* Worked with SQL queries, PL/SQL stored procedures, and database modifications.
* Ensured high-quality data collection and data integrity.
* Contributed patches to Django.
* Utilized Python for handling hits on Django, Redis, and other applications.
* Developed object-oriented programming for product management.
* Used Python libraries like wxPython, NumPy, and Matplotlib.
* Worked on environment code installation and SVN implementation.
* Built database mapping classes using Django models.
* Designed, implemented, and tested the Spring Domain Model using Core Java.
* Developed request handlers, JSPs, and data objects in Core Java.
* Created unit test and regression test frameworks.
* Debugged and troubleshoot web applications.

**Environment**: Python 2.7, Django 1.11, Scipy, Pandas, Bugzilla, SVN, C++, Java, MS SQL, Linux, Eclipse, JavaScript, XML, PL/SQL, Oracle 9i, Shell Scripting, HTML5/CSS, Apache.

**Education details:**

|  |  |  |
| --- | --- | --- |
| Course | University | Graduation Year |
| Master’s in Computer Information Systems | New England College | 2022 August |
| Bachelor of Commerce | Osmania University | 2014 |

**TECHNICAL SKILLS:**

* Programming Languages: Python, Java, C, C++
* Web Developments: Node JS, Express JS, JavaScript, HTML5, CSS/CSS3, Bootstrap, Ajax, JSON, jQuery, XML, REST API, Web Services
* Frameworks: Angular JS, Angular 2, Django
* IDE & Tools: Eclipse, PyCharm, Atom, Pydev, IDLE, Notepad++, Adobe Dreamweaver, Visual Code
* Database: Mongo DB, PL\SQL (oracle), MySQL, MS SQL, SQLite
* Servers: Apache Tomcat, WebSphere, WebLogic
* Version Controls: GitHub
* Cloud Technology: Amazon Web Services
* Python Libraries: Pandas, NumPy, SciPy, JSON, Unit Test, Tkinter, Beautiful Soap, Matplotlib, Plotly
* Machine Learning Algorithms: Linear Regression, Logistic Regression, Decision Tree, Random Forest, K Means Clustering, KNN, Time Series