

Govind Rajesh Pande

McLean, VA (Will work on hybrid model)

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Summary

- Highly skilled and motivated Developer with over 10 years of experience in designing, developing, and implementing applications. Proficient in Python, Go, and Java, with expertise in Django, Flask, and Pyramid for web development. Strong understanding of object-oriented programming and Linux environments.
- Expert in designing and implementing applications using Python, Go, and Java with a focus on Django, a high-level Python Web framework.
- Proven experience in developing web applications with Model View Control (MVC) architecture using Django, Flask, and Pyramid.
- Skilled in setting up Python REST API Framework with Django and utilizing Django ORM Libraries.
- Well-versed in various Python Integrated Development Environments (IDEs) like NetBeans, PyCharm, Eclipse, and Sublime Text.
- Extensive knowledge of Hadoop architecture and components, including HDFS, Yarn, MapReduce, Hive, Pig, HBase, Kafka, and Oozie.
- Excellent understanding of NoSQL databases such as HBASE, Cassandra, and MongoDB.
- Demonstrated expertise in design and development for OLTP and OLAP, utilizing Python packages like NumPy, Pandas, and more.
- Built GraphQL API endpoints using Go and gqlgen library.
- Proficient in Shell Scripting and UNIX commands, with experience in Python automation scripting.
- Experience with a variety of UI frameworks, including ReactJS, VueJS, and Angular to create user interfaces that are both functional and visually appealing.
- Proficient in writing unit and integration tests for Angular applications.
- Knowledgeable in Continuous Deployment (CD) using Heroku, Jenkins, and Ansible.
- Skilled in managing Continuous Integration (CI) server (Jenkins) to ensure high-quality builds.
- Experienced in Data Engineering with Airflow, Kafka, Spark, and cloud platforms like Azure, AWS, and GCP.
- Familiarity with JSON-based REST Web services and Amazon Web Services (AWS) technologies.
- Strong experience with Amazon Cloud EC2, Simple Storage Service (S3), and Amazon SQS, CloudWatch, Step Functions, Athena.
- Proficient in writing complex queries and procedures for various databases like MySQL and PostgreSQL.
- Skilled in SQL and PL/SQL queries, stored procedures, functions, and more using relational databases like Oracle, MySQL, Apache Spark, Cassandra, and MongoDB.
- Familiarity with Timescale DB optimized for storing time series data.
- Experience with PowerShell and shell scripting.
- Proficient in building data pipelines using Python/PySpark/HiveSQL/Presto/BigQuery and creating python DAGs in Apache Airflow.
- Familiarity with Unit Testing/ Test Driven Development (TDD).

Certifications

- Production Machine Learning Systems authorized by Google Cloud
<https://coursera.org/verify/6A89STCRVXUB>
- Architecting Solutions on AWS authorized by Amazon Web Services
<https://coursera.org/verify/82GJ6DG99KXR>
- AWS Cloud Technical Essentials authorized by Amazon Web Services
<https://coursera.org/verify/NUGS8X3CENWW>
- Containerized Applications on AWS course authorized by Amazon Web Services

<https://coursera.org/verify/W83ZDJPNBRQ2>

- Data Warehousing with Microsoft Azure Synapse Analytics course authorized by Microsoft
<https://coursera.org/verify/6TPHNVZVL6VA>
- Microsoft Azure Databricks for Data Engineering course authorized by Microsoft
<https://coursera.org/verify/58QKL8AVEHR4>
- Data Storage in Microsoft Azure course authorized by Microsoft
<https://coursera.org/verify/CQGJNKLOJSZ>
- Azure Data Lake Storage Gen2 and Data Streaming Solution course authorized by Microsoft
<https://coursera.org/verify/Q6Q433FR2TJ6>
- Microsoft Azure for Data Engineering course authorized by Microsoft
<https://coursera.org/verify/UMJUPH6RFENR>
- Data Engineering with MS Azure Synapse Apache Spark Pools authorized by Microsoft
<https://coursera.org/verify/UTKW3QHZLM3Q>
- Data Integration with Microsoft Azure Data Factory authorized by Microsoft
<https://coursera.org/verify/WWXVQT6W34UE>

Technical Skills

Programming Languages:	Python, R, Java, PySpark, R, Javascript, C/C++/C#, SQL, PL/SQL, HTML
Libraries and Frameworks:	Django, Flask, Streamlit, Gradio, scikit-learn, XGBoost, Keras, TensorFlow, Pytorch, Boto3, pandas, Numpy, Scipy, Docker, Kubernetes, Spark, Beautiful Soup, Hugging Face, Langchain
AWS Cloud Services:	AWS Glue, AWS Lambda, Secrets Manager, IAM, AWS Athena, Redshift, AWS Elastic Beanstalk, AWS EKS, AWS EC2, AWS DynamoDB, AWS ECS, AWS S3, AWS Sagemaker, AWS SNS, AWS Lex, SQS, Eventbridge, API Gateway, AWS Cloudformation
Azure Cloud Services:	Azure Synapse, Cosmos DB, Azure Databricks, Azure AKS, Azure Blob Storage, Step Functions, Azure Data Factory (ADF), Azure Logic Apps, Azure Function Apps
Databases:	Redshift, Snowflake, PostgreSQL, MySQL, Neo4j, Azure Synapse, SQL Server, MongoDB, DynamoDB, Aurora DB, Cloud Bigtable, CosmosDB, TimescaleDB
Version Control:	SVN, GIT, GitLab, GitHub, Bitbucket
OS & Environment:	Windows, UNIX, LINUX, MacOS
SDLC Methodologies:	Agile, TDD, Waterfall, SCRUM
Data Pipeline Orchestration:	Docker, GitLab CI/CD, Airflow, Groovy, Jenkins, Kubernetes
Data Visualization:	Matplotlib, Looker, Tableau, PowerBI, Qlik Sense
Machine Learning Methods:	A/B testing, Natural Language Processing (NLP), Classification, SVM, Regression, Prediction, Statistical Modeling, Recommendation System, Time Series Forecasting, Computer Vision, Transformers, Large Language Models (LLM)
Front End Frameworks:	JavaScript, Vue.js , React, Angular, HTML, CSS
ETL, ML and Big Data Tools:	Machine Learning, Deep Learning, Databricks, ML Flow, MLLib, Dataiku, Data Robot, AWS Glue, Talend, Informatica, HBase, HDFS, Yarn, MapReduce, Hive, Pig, HBase, Kafka, Oozie
LLM Models	GPT 3.5, GPT 4, LLAMA, FALCON, ALPACA, BERT, FLAN T5, Pinecone DB

Education

- MS in Data Science from New York University of Technology, NY, Dec 2022

- Bachelor's in Civil engineering from Savitribai Phule Pune University, Jun 2013

Project Details

Capital One, VA

18 Sep 2023 – Present

Sr. Python Developer

Responsibilities:

- Developed REST APIs to fetch data from GitHub repositories and render them on Angular components.
- Configured URL routing protocols for different environments.
- Collected requirements and feedback to create user stories for creating a dashboard.
- Using Databricks, created ETL pipeline to load data into Snowflake.
- Combined HR data with email user metrics data to enable enhanced and granular view for the data.
- Created a 7-page interactive and user-friendly Tableau Dashboard.
- Integrated A/B testing tool in the dashboard to perform hypothesis testing and draw insights from the data.
- Automated the creation and rotation of secrets using AWS Secrets Manager and IAM.

Environment: Python 3.4, PySpark, Snowflake, Amazon AWS Services, Angular 13/14/16, Nest.js, Databricks, Linux, Shell Scripting, SQL, Jenkins

Wells Fargo, NC

Jan 2022 – 24 Aug 2023

Sr. Python Developer

Responsibilities:

- Hands-on experience in writing and reviewing requirements, architecture documents, test plans, design documents, quality analysis and audits. Involved in Developing a Restful service using Python Flask framework.
- Developed entire frontend and back-end modules using Python on Django Web Framework with GIT.
- Hands on experience in developing ETL data pipelines using PySpark, AWS Glue on AWS EMR.
- Developed data ingestion modules using AWS Step Function, AWS Glue and Python Modules.
- Experience in AWS Cloud Computing services, such as EC2, S3, Lambda, API, DynamoDB, EBS, VPCC, ELB, Route53, Cloud Watch, Athena.
- As part of Azure Data Factory training created end to end ETL workflow for Netezza-to-Azure data migration POC.
- Used AWS Services like EC2 and S3 for small data sets processing and storage, Experienced Maintaining the Hadoop Cluster on AWS EMR.
- Hands on experience in AWS like Amazon EC2, Amazon S3, Amazon Redshift, Amazon EMR and Amazon SQS, Glue, Athena, Lambda etc.
- Implemented Data Quality framework using AWS Athena, Snowflake, Airflow and Python.
- Successfully migrated the Django database from SQLite to MySQL to PostgreSQL with complete data integrity.
- Used LIAMA 2 with Redis Vector DB, LlamaIndex, HuggingFace, and Langchain to create a web application.
- Contributed to the Mortgage Repayment dashboard product by building data pipelines and REST APIs.
- Created custom data validation and integrity checks using PL/SQL.
- Responsible for delivering datasets from Snowflake to One Lake Data Warehouse and built CI/CD pipeline using Jenkins and AWS Lambda and Importing data from DynamoDB to Redshift in Batches using Amazon batch using TWS scheduler.
- Designed STAR schema and Snowflake Schema Data Warehouses in Snowflake while maintaining complete data integrity and security.
- Experience with AWS Lex and AWS Bedrock to build chatbots.

- Integrated AWS Lex with Slack to automatically reply to questions based on previous questions and documentation.
- Created and maintained ETL pipelines and updated the transformation logic using Databricks.
- Maintained Puppet for testing various unit/system automation schemes and worked on Jenkins to deploy your Django application and run unit tests.
- Integrated AWS Lex with other AWS services like Lambda functions, DynamoDB and Step Functions to create end-to-end conversational apps.
- Implemented user authentication and authorization mechanisms with AWS Lex to ensure secure and controlled access to sensitive information.
- Designed and maintained PostgreSQL database architecture and used SOAP and Restful API for information extraction.
- Implemented RAG architecture, and error handling to allow chatbots to gracefully handle situations where user input is not recognized.
- Worked on Pandas Libraries to put the data as time series and tabular format for easy timestamp data manipulation and retrieval.
- Developed data transition programs from DynamoDB to AWS Redshift (ETL Process) using AWS Lambda by creating functions in python for certain events based on use cases.
- Added support for Amazon AWS S3 and RDS to host static/media files and the database into Amazon Cloud.
- Experience with Angular CLI and other Angular tooling.
- Involved in front end and utilized Bootstrap and Angular.js for page design.
- Designed, developed, and tested data pipelines to ingest real time data from Kafka topics using Kafka and Spark Streaming.
- Containerized python application using Docker and deployed it on Kubernetes cluster using AWS EKS.
- Used Amazon Web Services (AWS) for improved efficiency of storage and fast access.
- Developed a fully automated continuous integration system using Git, Gerrit, Jenkins, MySQL and custom tools developed in Python and Bash.
- Designed and created backend data access modules using PL/SQL stored procedures and Oracle.
- Good experience in writing SQL Queries and implementing stored procedures, functions, packages, tables, views, Cursors, triggers.
- Wrote Python Code using Ansible Python API to Automate Cloud Deployment Process
- Experienced in working with various Python IDE's using PyCharm and Sublime Text.
- Developed and designed automation framework using Python, Groovy and Shell scripting.
- Generated Python Django forms to record data of online users and used PyTest for writing test cases.

Environment: Python 3.4, Django 2.0, Amazon AWS Services, Angular 13/14, Azure, Databricks, Linux, Shell Scripting, Oracle 12c/11g, SQL, PL/SQL, Jenkins, Terraform, Groovy, Docker, Kubernetes

HDFC, India

Apr 2018 – Aug 2021

Python Developer

Responsibilities:

- Participate in requirement gathering and analysis phase of the project in documenting the business requirements by conducting workshops/meetings with various business users.
- Exposure on Multi-Threading factory to distribute learning process back-testing and into various worker processes.
- Responsible for delivering datasets from Snowflake to One Lake Data Warehouse and built CI/CD pipeline using Jenkins and AWS Lambda and Importing data from DynamoDB to Redshift and Snowflake in Batches using Amazon batch using TWS scheduler.

- Built POCs for DevOps pipeline using AWS Elastic Kubernetes Service by running it on AWS EC2 and AWS Fargate.
- Managed, developed, and designed a dashboard control panel for customers and Administrators using Django, Oracle DB, PostgreSQL and REST API calls.
- Have Experience in List Comprehensions and python inbuilt functions such as Map, Filter and Lambda.
- Created Business Logic using Python to create Planning and Tracking functions.
- 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.
- Created and optimized Oracle Database queries using PL/SQL.
- Build POC for migration of on-prem database server to AWS RDS using AWS Data Migration Service.
- Contributed to the BI team's migration from Tableau to building Django dashboards from scratch.
- Managed, developed, and designed a dashboard control panel for customers and administrators using Django, Oracle DB and PostgreSQL.
- Set up secrets for dev, beta and prod environments using AWS Secrets Manager.
- Developed data transition programs from DynamoDB to AWS Redshift (ETL Process) using AWS Lambda by creating functions in python for certain events based on use cases.
- Automated the existing scripts for performance calculations using NumPy and sql alchemy.
- Configured spark clusters in Databricks to optimize execution time for large datasets.
- Created ETL pipelines to ingest data in batches from S3 buckets and loaded them into Snowflake Data Warehouse for creating dashboards.
- Created STAR schema model in Snowflake Data Warehouse load data from 3NF schema model in AWS RDS to increase query performance.
- Automated secrets creation using AWS Secrets Manager and AWS IAM for Data Analyst team.
- Used NumPy for Numerical analysis for Insurance premium.
- Managed large datasets using Panda data frames and MySQL.
- Managed code versioning with GitHub, Bit Bucket, and deployment to staging and production servers.
- Successfully delivered a dashboard project with Angular that was used by a team of 100+ users.
- Handled potential points of failure through error handling and communication of failure.
- Risk analysis for potential points of failure (database, communication points, file system errors).
- Used pyspark and spark SQL in Databricks to explode nested JSON file, perform transformations and load it into a separate S3 bucket.
- Developed a fully automated continuous integration system using Git, Gerrit, Groovy, Jenkins, MySQL and custom tools developed in Python and Bash.
- Develop consumer-based features and applications using Python, Django, HTML, Behavior Driven Development (BDD) and pair-based programming.
- Maintained Puppet for testing various unit/system automation schemes and worked on using Jenkins and Groovy to deploy our Django application and run unit tests.

Environment: Python3.2, MySQL, PL/SQL, HTML, Django, Flask, HTML5, CSS, XML, MySQL, JavaScript, Angular 8/9/10, AWS, Databricks, Linux, Shell Scripting, Jenkins, Kubernetes, Docker

Deloitte, India

Aug 2014 – Mar 2018

Python Developer

Responsibilities:

- Developed Python based API (RESTful Web Service) to track events and perform an
- alysis using Django.
- Created a Python/Django based web application using Python scripting for data processing, MySQL for the database, and HTML/CSS/JQuery and High Charts for data visualization of the served pages.

- Experience in AWS Cloud Computing services, such as EC2, S3, Lambda, API, DynamoDB, EBS, VPCC, ELB, Route53, Cloud Watch, Athena.
- Implemented Data Quality framework using AWS Athena, Snowflake, Airflow and Python.
- Designed Cassandra schema for the APIs and Parsed XML file using Python to extract data from database.
- Designed and deployed an API driven warehouse inventory management system using Django backend and Angular front end.
- Developed server-based web traffic statistical analysis tool using Flask, Pandas and implemented on premise MongoDB Monitoring Service (MMS) and created dashboards for monitoring the MongoDB environment.
- Developed a fully automated continuous integration system using Git, Gerrit, Jenkins, MySQL and custom tools developed in Python and Bash.
- Used Restful web service calls for the validation.
- Involved in Using AWS Cloud Watch performed Monitoring, customized metrics, and file logging.
- Built web-services using SOAP that allowed integrating the business application with the legacy applications and facilitates for future applications.
- Involved in debugging the applications monitored on JIRA using agile methodology.
- Designed and developed the UI of the website using HTML, AJAX, CSS and JavaScript.
- Added support for Amazon AWS S3 and RDS to host static/media files and the database into Amazon Cloud.
- Developed data ingestion modules using AWS Step Function, AWS Glue and Python Modules.
- Responsible for both back-end programming in PHP and front-end functionality using JavaScript, Ajax, jQuery libraries, and other technologies and developed GUI using PHP, HTML, CSS, JavaScript, jQuery, Bootstrap.
- Design and development of UI screens using JSP.
- Developed and implemented the user registration and login feature for the application process from scratch by extending Django user model.
- Worked with AJAX framework to get the asynchronous response for the user request and used JavaScript for the validation.
- Developed user-friendly modals for the form submissions using simplemodal.js, JQuery, Ajax and JavaScript.
- Automated the existing scripts for performance calculations using Numpy and SQLAlchemy.
- Involved in creating and extracting data from database using SQL Queries, PL/SQL on Oracle database.
- Used Python and Django creating graphics, XML processing, data exchange and business logic implementation.

Environment: Python 2.7, Django 1.6, HTML5, CSS, XML, MySQL, MongoDB, Neo4J, EC2, JavaScript, Angular JS, Vue.js, JQuery, CSS Bootstrap, RabbitMQ, Celery, T-SQL, PL/SQL, Step Functions, JavaScript, Eclipse, Git, GitHub Linux, Redis, Shell Scripting.