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## **SUMMARY:**

- **6+ years** of experience as Application Developer with analytical programming using Python.
- Skilled experience in Python with proven expertise in using new tools and technical developments (libraries used: Arcpy, Pandas dataframe, numpy, matplotlib, Tkinter, Beautiful Soup, Jasy, Scipy, Pickle, PySide, Python-twitter, networks, urllib2, MySQL dB for database connectivity).
- ESRI ArcGIS programming ability and knowledge of spatial and data management tools.
- Experience in ESRI's API's within ArcGIS Desktop, ArcSDE and ArcGIS Server.
- Experience in implementing Model View Control (MVC) architecture using server-side applications like Django, Flask and Pyramid for developing web applications.
- Experienced in working with various Python Integrated Development Environments like Spyder, IDLE, jupyter notebook, PyScripter, IDLE, PyStudio, PyDev and Sublime Text.
- Basic understanding of protocols/technologies like HTTP, LDAP, JDBC, SSL, Servlet/JSP, SQL, HTML, XML.
- Proficient in using editors VS Code, PyCharm, PyScripter, Notepad++ and Sublime Text while developing different applications.
- Experienced in all facets of full CM process with tools such as GIT, Jenkins, SVN, Clear Case.
- Experienced in creating AWS IAM and Security Group in Public and Private Subnets in VPC. Created AWS Route53 to route traffic between different regions.
- Expert level experience in Infrastructure as Code Automation Tools like Cloud Formation, Terraform, Packer, using Python SDK's provided by Cloud providers etc.
- Experience in writing CloudFormation templates to automate AWS environment creation along with the ability to deployment on AWS, using build scripts (AWS CLI) and automate solutions using Shell and Python.

- Worked DevOps methodologies and cloud infrastructure automation tools like AWS, Chef by using Terraform.
- Exploring with the Spark improving the performance and optimization of the existing algorithms in Hadoop using Spark Context, Spark-SQL, Data Frame, Pair RDD's, Spark YARN.
- Used all major ETL transformations to load the tables through Informatica mappings.
- Experience in Application Automation Tools like UC4.
- Experience with Django, a high-level Python Web framework.
- Experience in working with Python ORM Libraries including Django ORM.
- Good Knowledge in implementation of Python best Practices (PEP-8).
- Good at writing SQL Queries, Stored procedures, functions, packages, tables, views, triggers using relational databases like Oracle, MySQL, DB2.
- Experience in performance tuning and optimization of stored procedures and queries.
- Performed data cleansing in order to perform duplication and validation for the purpose of redundant data elimination.
- Good knowledge in Microsoft Word, Excel, PowerPoint, Outlook and Access.
- Experience in using Excel for data analysis and manipulation.
- Good knowledge in BI reporting tool like Power BI.
- Experienced in developing test automation framework with Python scripting.
- Exceptional written and verbal communication, time management, presentation and interpersonal skills.
- Having experienced in Agile Methodologies, PCI, Scrum stories and sprints experience in a Python based environment, Data analytics, data wrangling and Excel data extracts.
- Worked on various operating systems like Windows, UNIX and LINUX.

#### **CERTIFICATION:**

- Python Institute – Certified Entry-Level Python Programmer (PCEP)  
12/2023  
Python Institute

#### **EDUCATION:**

- MADURAI KAMARAJ UNIVERSITY Master of Computer Application(MCA)

## PROFESSIONAL EXPERIENCE:

PG&E, Walnut Creek, CA

Jul 2021 –

Present

Python Developer

### Responsibilities:

- Developed python script to update geodatabase using Arcpy libraries and MySQL.
- Create and consuming ArcGIS geoprocessing tools.
- Developed python script to handle backward compatibility.
- Build geoprocessing script to automate complex tasks.
- Experience of supporting spatial databases.
- Following standards, write, maintain and document code and scripts needed in support of applications.
- Work in fast-paced environment both independently and in a team.
- Designed and developed python scripts for data representation, data transformations and analytics.
- Work with UC4 for Job Scheduling.
- Developed SQL queries to analyze and update data and evaluated SQL statements.
- Designed and developed data schema.
- Designed and developed algorithm for Rainflow mathematical model.
- Perform data integration from multiple sources using OSIsoft web API, TCX files.
- Developed python scripts to avoid duplicate files from the server generated files.
- Developed a GUI application using python.
- Involved in creating unit Test cases and Test plan.
- Involved in manual testing.
- Performed validation for the written test case.
- Software development was designed and implemented using Agile Methodology and SCRUM Process.
- Handling customer issues/escalation.
- Gather and analyze the requirements from business users and transform them into useful documents.
- Participated in daily status meeting for status update.

- Participated in meetings with business stakeholders for demos and identify any potential risks associated with the sprint releases.
- One time bulk load of Customer Service Point Meter info into GDGIS
- A new or changes to existing Customer Service Point Meter info is made with CC&B
- Refreshed CC&B data captured in MIB Database
- MIB Data pull by Informatica into GDGIS .sde and processed by Meter Integration scripts
- Elevation of Service Location calculated and sent to CC&B for gas billing purposes and with GIS Service Location Identifier.
- Manage workload within multiple projects, delivering results within agreed deadlines.
- Sending the GIS data to SAP so that SAP can update in all the LOB in the Flat File.
- Updating existing region-related attributes in Foundation GIS tables.

**Environment:** Python 2.6/2.7, Arcgis desktop 10.2, 10.8, 10.6, IDLE, VS Code, Anaconda 2, Spyder, Jupyter Notebook, Github, Microsoft SQL Server 2012, Excel, PowerPoint, Power BI, ArcMap, ArcCatalog, oracle client 11g

**Underwriter Laboratories, Princeton, NJ**  
2021

**Jan 2021 – Jun**

**Python/AWS Developer**

**Responsibilities:**

- Developed tools using Python, Shell scripting, XML to automate some of the menial tasks.
- Interface with supervisors, artists, systems administrators, and production to ensure production deadlines are met.
- Designed and managed API system deployment using fast HTTP server and Confidential AWS architecture
- Setting up Elastic Load Balancers (ELB's) and Auto Scaling groups on Production EC2 Instances to build Fault-Tolerant and High Availability applications.
- Developed entire frontend and backend modules using Python on Django Web Framework.

- Used Python and Django creating graphics, XML processing, data exchange and business logic implementation
- Utilized PyUnit, the Python unit test framework, for all Python applications.
- Designed and maintained databases using Python and developed Python-based API (RESTful Web Service) using Flask, SQL Alchemy, and PostgreSQL.
- Used Grafana for Dashboards and visualization of Kubernetes Cluster.
- Creating Python scripts to automate daily networking tasks (Ex. auto Config generation, retrieving information from network devices, parsing data, etc.) - including a custom Fortigate firewall Config generator (which included multi-threaded functionality to generate Configs for multiple firewalls at once).
- Using Confidential EC2 command line interface along with Bash/Python to automate repetitive work.
- Build scripts on AWS cloud for scheduling EC2 auto scaling load balancer with Python.
- Involved in Developing a Restful service using Python Django framework and created an entire application using Python Django, MySQL, and Linux.
- Wrote Lambda functions in python for AWS Lambda and invoked python scripts for data transformations and analytics on large data sets in EMR clusters and AWS Kinesis data streams.
- Developed and Implemented Performance Automation Test Framework base functions by writing Python scripts using AWS Python SDK Boto3 to configure, manage, deploy and automate most of the Amazon Web services.
- Designed and configured EC2 instances in all environments, set up Security Groups, Elastic Load Balancer (ELB), and Auto scaling groups in multiple Availability zones, Route 53 with automatic failover and latency-based routing to ensure high availability and fault tolerance.
- Created Python scripts to automate AWS Services which includes ELB, CloudFront, Lambda, database security and application configuration
- Planned and configured network infrastructure within the VPC by public and private subnets and configured routing tables, internet gateway, and Security Groups in AWS; wrote Terraform and Python scripts to automate AWS services.
- Developed GUI using webapp2 for dynamically displaying the test block documentation and other features of python code using a web browser.

- Worked on Confidential Web Services (AWS) Cloud services such as EC2, EBS, S3, VPC, Cloud Watch, and Elastic Load Balancer.
- Involved in writing SQL queries implementing functions, triggers, cursors, object types, sequences, indexes etc.
- Created Data tables utilizing MySQL utilized Jinja to access data and display it in the front end.
- Used Python based GUI components for the front-end functionality such as selection criteria.
- Implemented navigation rules for the application and page outcomes, written controllers using annotations.
- Used Pandas API to put the data as time series and tabular format for easy timestamp data manipulation and retrieval, also used Anaconda's flagship product.
- Developed and Implemented Kubernetes manifests, helm charts for deployment of microservices and installation of Prometheus, Grafana monitoring pods into K8s clusters.
- Participated in weekly release meetings with Technology stakeholders to identify and migrate potential risks associated with the releases.
- Involved in designing and developing of Automation Test cases using Selenium WebDriver, Java, and TestNG.
- Designed Test Plans and Test Cases, Verifying and Validating Web based applications
- Imported and managed multiple corporate applications into Subversion (SVN).
- Development, Quality Assurance and Management teams to ensure cross communication and confirmed approval of all production changes.
- Connected continuous integration system with GIT version control repository and continually build as the check-in's come from the developer.
- Performed Continuous Integration with Jenkins.

**Environment:** Python 3.8, AWS, EC2, EBS, S3, VPC, Anaconda Enterprise, PyCharm, Selenium IDE, jQuery, MySQL, HTML, CSS, JavaScript, Ajax, Web Services, Pandas, JSON, Angular.js, Bootstrap, Jinja, Flask, MongoDB, SQL Workbench

Kabbage, Bangalore, India

Sep 2015 –

Aug 2018

Software Developer/Python Developer

**Responsibilities:**

- Involved in developing web applications using Django Framework to implement the model view control architecture.
- Involved in Developing a Restful service using Python Flask framework.
- Created entire application using Python, Django, MySQL and Linux.
- Developed the presentation layer using HTML, CSS, and JavaScript, jQuery and AJAX and used jQuery libraries for all client-side JavaScript manipulations.
- Performed efficient delivery of code based on principles of Test-Driven Development (TDD) and continuous integration to keep in line with Agile Software Methodology principles.
- Lock mechanisms were implemented, and the functionality of multithreading has been used.
- Developed a fully automated continuous integration system using Git, Gerrit, Jenkins, MySQL and custom tools developed in Python and Bash.
- Managed, developed, and designed a dashboard control panel for customers and Administrators using Django, Oracle DB, PostgreSQL, and VMWare API calls
- Managed MongoDB environment from availability, performance and scalability perspectives.

**Environment:** Python 3.3, PyCharm, MySQL, HTML, CSS, jQuery, Ajax, Web Services, GIT, Django