

Ibrahim M

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WORK EXPERIENCE

Sr Python Developer, Endeavor Health

August 2021 – January 2025

- Developed scalable microservices in Python adhering strictly to PEP 8 coding standards.
- Worked on the Enhanced Governance Control (EGC) project, integrating rules for budget control through Ansible API, called during the CI/CD process.
- Migrated legacy infrastructure to AWS CDK, enabling faster deployment cycles and improved resource management.
- Developed and maintained serverless applications using AWS Lambda, integrating with various AWS services such as S3, EC2, and CloudWatch.
- Worked on data migration strategies from on-premises databases to AWS RDS and DynamoDB, enhancing application scalability and performance.
- Developed Python scripts with Pandas and NumPy for data transformation and normalization, improving data quality for analytics purposes.
- Worked on Machine Learning (ML) algorithms like decision trees, SVM, clustering, and deep learning using Python libraries such as scikit-learn and MATLAB.
- Developed Lambda functions to automate cloud resource management and trigger events on AWS S3 and Event Bridge.
- Designed and developed REST APIs and microservices using Flask, Django, and FastAPI for data retrieval and manipulation.
- Created Lambda API which handles SQS event messages and parses VSAD from the message body for cost estimation using Google Cost Estimation API.
- Designed and implemented multiple RESTful APIs using Node.js and Express for seamless integration between microservices and front-end applications.
- Integrated Redux for state management across large-scale React applications, improving maintainability and scalability.
- Developed dynamic user interfaces using React.js, HTML, CSS, and JavaScript, integrating third-party APIs.
- Implemented microservices architecture with Kafka as the central bus for inter-service communication.
- Used FastAPI to create robust RESTful APIs and enhance application modularity and maintainability.
- Developed Single Page Applications (SPA) using React.js, Node.js, and Redux.
- Worked on regression automation testing using JavaScript, WebDriver IO, and implemented test cases using qTest and Allure Reports.
- Worked with data transformation projects involving SAP and SaaS integrations.
- Migrated data to AWS services like RDS and DynamoDB, improving the scalability and performance of applications.
- Managed data migration using AWS Glue, S3, and RDS, leveraging Golang for orchestration and automation of cloud resources.
- Optimized server-side Node.js code for better performance, reducing response times by up to 30%.
- Used JSON and XML formats for data processing and machine learning model integration.
- Worked with AWS services to create and automate infrastructure using AWS CDK for Lambda functions, S3, and Step Functions.
- Automated deployment processes using AWS CDK, reducing manual effort and improving deployment accuracy by 30%.
- Integrated AWS CloudFormation and AWS SAM for serverless application deployment, reducing errors and enhancing development processes.
- Managed and optimized EC2 instances, reducing cloud costs by 20% through reserved instances and spot pricing strategies.
- Maintained CI/CD pipelines with AWS Code Pipeline integrated with CloudFormation for seamless automated deployments.
- Worked on the Rightsizing project, optimizing cloud resources using AWS, OCI, EBS, and RDS, and automated reports using Python and Node.js.
- Created and managed AWS Lambda event triggers based on S3 and EventBridge.

- Used Git for version control and coordinated team development.
- Developed application features using React.js, Node.js, and Python, enabling seamless integration with AWS resources.

Environment: Python 3.11, Fast API, AWS QuickSight, MySQL, Snowflake, Kubernetes, AWS, Kafka, EKS, Event Bridge, CI/CD, Terraform, PowerBI, Tableau, Amazon SQS, OCI, EBS, RDS, JavaScript, NodeJS, microservices, Docker, Oracle Cloud Infrastructure (OCI), HTML, CSS, JavaScript, Terraform, React.JS, Bootstrap, qTest, Allure Reports, API, Postman, Machine Learning (ML) algorithms, JIRA.

Python Developer, State Farm

July 2019 – August 2021

scalable data integration solutions using Kafka and EventBridge

to handle large volumes of data efficiently.

- Developed REST APIs to enable communication between various services and applications.
- Developed views and templates with Python and Django's view controller and templating language to create a user-friendly website interface.
- Integrated third-party services into applications using RESTful APIs to extend functionality.
- Used jQuery and Ajax for transmitting JSON data objects between the frontend and controllers.
- Implemented an automated disaster recovery system using AWS CloudFormation and Python, significantly reducing recovery time.
- Built and maintained web applications using Python, integrated with PostgreSQL databases.
- Successfully migrated Django database from SQLite to MySQL with complete data integrity.
- Added support for Amazon AWS S3 and RDS to host static/media files and the database into Amazon Cloud.
- Wrote SQL Queries, Stored Procedures, and Triggers using Oracle, SQL, and PL/SQL.
- Implemented infrastructure as code using Terraform to manage AWS resources and automate deployments.
- Created and managed CI/CD pipelines using Jenkins, ensuring efficient and reliable deployment processes.
- Deployed microservices-based architectures using AWS Lambda and API Gateway, handling over 10,000 requests per hour with auto-scaling and load balancing.
- Implemented AWS Lambda functions triggered by various AWS services to automate workflows.
- Monitored application performance and logs using AWS CloudWatch.
- Developed and maintained numerous serverless applications using AWS Lambda, reducing operational costs and improving scalability.
- Designed and deployed scalable infrastructure with AWS, leveraging services such as S3, RDS, and CloudFormation.
- Assisted in the development and maintenance of Python-based applications for AWS environments.
- Worked on UI using HTML5, CSS3, and AngularJS for front-end development.

Python Developer, Verizon

January 2016 – June 2019

- Developed microservices using Python and Golang, adhering to best practices for scalability and maintainability.
- Created server-side automation using Node.js scripting to connect with different types of SQL and NoSQL stores.
- Wrote unit tests using unit test framework and resolved bugs using Firebug.
- Developed automation scripts and integrated systems using Python and Django Web Framework.
- Used PyBuilder to configure application builds and deployments.
- Developed applications using the Django Web Framework, focusing on controllers, views, and models.
- Integrated RESTful APIs with frontend frameworks and mobile applications.
- Upgraded and maintained the frontend UI using HTML, CSS, jQuery, and Bootstrap.
- Developed SOAP-based Web Services and deployed them on Tomcat Server.
- Utilized Salt Stack for configuring and managing infrastructure.
- Handled database system integrations, using ORM (Object-Relational Mapping) for mapping data from MVC models to Oracle Relational Data Models with SQL-based schema.

- Monitored and maintained database performance to ensure smooth application functionality.
- Worked with AWS services for application deployment and integration.
- Managed and deployed Golang applications on Kubernetes, leveraging Helm for configuration management.
- Used Jenkins for continuous integration, ensuring smooth build and deployment processes across environments.
- Created test plans for infrastructure upgrades, patches, and fixes, automating processes where possible.
- Utilized Kafka and Event Bridge for event-driven architectures.
- Used JIRA for bug and issue tracking, managing project tasks and resolutions.
- Coordinated team development using GIT for version control and collaboration.
- Employed Sublime Text as the primary IDE for development.

Environment: Python 2.7, Python 3.1, SQL, AWS QuickSight, Tableau, Kubernetes, AWS, Kafka, , EKS, FastAPI, Django 1.7, PEP 8, HTML5, CSS, PySpark, Terraform, SQLAlchemy, jQuery, JSON, JavaScript, PostgreSQL, MongoDB, Ansible, PowerBI, microservices, Elastic Load Balancer, Elastic Search, Docker, Airflow, MySQL, NOSQL, Google Cloud, Amazon S3, Redshift, JIRA.

EDUCATION

Hellenic American University

Master of Business Administration, Information Technology

Lindsey Wilson College

Master of Computer Applications – MCA, Master of Computer Science Information Technology Administration

Osmania University

Bachelor Of Science, Biotechnology

SKILLS

AngularJS, Artificial Intelligence, Back End, Bootstrap.js, Cloud Computing, Continuous Integration, Developer, Django, Docker, EC2, Elasticsearch, Git, Java, JavaScript, Jenkins, JQuery, JSON, Kafka, Kubernetes, Machine Learning, Model View Controller, MongoDB, Node.js, NoSQL, PostgreSQL, Project Management, Tomcat, Training And Teaching Others, Web Services, XML