Karyna B.

SOFTWARE ENGINEER

Education
Computer Science and Software Engineering

Language proficiency
English — B2

Domains
Healthcare,

Social,

Management

Software Engineer with 5 years of experience.
I am a highly skilled and knowledgeable professional, with a deep understanding of various technologies and their applications. My expertise enables me to quickly and efficiently create innovative solutions using the tools and technologies in my toolbox.

Programming languages
Python.

Backend
FastAPI, Django, Django Rest Framework, Flask, SQLAlchemy, Marshmallow, Alembic, ElasticSearch, Pydantic, Celery.

Message brokers
RabbitMQ, Kafka, AWS SQS, Cloud Pub/Sub.

Databases
PostgreSQL, Redis, MongoDB, DynamoDB, BigTable.

Fraud detection tools
CLEAR.

Cloud
AWS(S3, SQS, SAM, RDS, SNS, CDK, SES, Lambda, API Gateway, ECS, ECR, EKS, Step Functions, EC2, Cognito, CloudFormation, etc.),

GCP(BigTable, Cloud SQL, Cloud Storage, Cloud Functions, Compute Engine, Pub/Sub, etc.).

DevOps
Docker, Docker Compose, Kubernetes(k8s), Jenkins, GitHub Actions, Terraform.

Source control systems

Git, Bitbucket, GitHub, GitLab.

Achievements

Improved Scalability and Cost Efficiency with AWS Lambda

Implemented AWS Lambda functions in a Python project, enabling serverless computing and achieving significant improvements in scalability and cost efficiency. Refactored monolithic components into serverless functions, resulting in a 40% reduction in infrastructure costs and eliminating the need for idle server resources.

Maintaining CI/CD pipelines

Implemented and maintained continuous integration and continuous delivery systems, reducing deployment time by 40%.

API Response Time Reduction

Implemented efficient caching mechanisms and optimized database queries, which led to a 40% reduction in API response times, enhanced the overall user experience by providing faster access to data and increasing the application's scalability to handle peak loads.

Projects

APP FOR ASTHMATICS

It was an app for people-asthmatics. Which has functionality that allows you to easily and quickly set up the necessary reminders for any day and any time that will prompt you to take a dose. This app has the ability to choose the right inhaler, based on your doctor's recommendations.

Project roles

Software Engineer

Period

04.2023 - till now

Responsibilities

- Designing and implementing REST API;
- Document the intervention protocols and response paths in HIPO diagrams, outlining the steps for medical staff to follow in response to alerts and notifications for timely medical interventions;
- Backend development;
- Monitoring software development tools and platforms;
- Integrate CLEAR to avert potential fraud risk;
- Implementing and enforcing data privacy policies to ensure the compliance with HIPAA standards;
- Monitoring and troubleshooting web server issues, such as high CPU or memory usage;
- Building AWS infrastructure using AWS CDK;
- Create and manage complex workflows with AWS Step Functions;
- Create a web API with an HTTP endpoints for AWS Lambda function by using AWS API Gateway;
- Design and develop efficient and reliable data pipelines using AWS Lambda;
- Configuring an AWS SQS queue to trigger an AWS Lambda function;
- Deployment of application using AWS ECS;
- Storing and archiving highly critical data and backups on AWS S3;
- Writing and optimizing complex SQL queries for

data analysis and reporting;

- Developed and optimized complex SQL queries and triggers to ensure efficient and accurate data retrieval and manipulation;
- Set up CI/CD with Jenkins;
- Creating services from scratch with all the CI/CD, pre-commit configurations, and environment settings;
- Fixing production bugs;
- Writing unit and integration tests;
- Onboarding newcomers;
- Code review.

Environment

Python, FastAPI, Django, Django Rest Framework, SQLAlchemy, Pydantic, Alembic, ElasticSearch, CLEAR, AWS(S3, SQS, CDK, SES, Lambda, API Gateway, ECS, ECR, Step Functions, EC2, etc.), PostgreSQL, MongoDB, Kafka, Jenkins, Docker, Docker Compose, Bitbucket.

OPTICS SHOP AUTOMATION TOOL

The company was engaged in the sale and manufacture of glasses, contact lenses, and also sold its products. On the project there were doctors with valid licenses who wrote out a prescription for contact lenses. Our task was to correctly process the information entered by the user.

Project roles

Software Engineer

Period

02.2021 - 04.2023

Responsibilities

- Backend development;
- Configuring AWS S3 events publishing to AWS SNS topic;
- Manage globally distributed, multi-model NoSQL databases using AWS DynamoDB;
- Operate and scale a relational database using AWS RDS;
- Enable automatic backups on AWS RDS;
- Monitoring metrics in an AWS RDS database;
- Defining roles on IAM;

- Configuring and administering RabbitMQ for services communication;
- Database query optimization;
- Managing Kubernetes(k8s) on AWS EKS;
- Using Kubernetes(k8s) for automating many aspects of the workflow, such as health checks and resource and container management;
- Writing complex migrations in pure SQL;
- Optimization of the application for maximum speed and scalability;
- Implementing automated workflows using Gitlab CI/CD for CI/CD pipelines;
- Writing unit and integration tests.

Environment

Python, FastAPI, Flask, SQLAlchemy, Alembic, Pydantic, AWS(S3, Lambda, API Gateway, CloudFormation, RDS, SES, EKS, ECR, IAM, DynamoDB, SQS, Cognito, etc.), RabbitMQ, Docker, Docker Compose, Celery, PostgreSQL, Redis, GitHub, GitHub Actions, Kubernetes(k8s).

CORPORATE PLATFORM

A corporate platform with which you can manage employees and projects. This platform allows you to create new projects, indicate the employees who will work on this project, indicate the deadlines. It is also possible to check the employment of an employee, view the technical stack, employee level and knowledge of foreign languages.

Project roles

Software Engineer

Period

05.2019 - 02.2021

Responsibilities

- Backend development;
- Database management;
- REST API implementation;
- Implement serverless part of application using Google Cloud Functions;
- GCP Cloud Storage configuration for storing images and other files;
- Implement document management service using Google Cloud Storage;

- Managing Cloud SQL database;
- Implement notification service using GCP Pub/Sub;
- IaC with Terraform;
- Monitoring and troubleshooting CI/CD;
- Helping in CI/CD development;
- Writing unit and integration tests;

Environment

Python, Django, Django Rest Framework, Flask, SQLAlchemy, Alembic, Marshmallow, GCP(BigTable, Cloud SQL, Cloud Storage, Cloud Functions, Compute Engine, Pub/Sub, etc.), Kafka, PostgreSQL, Redis, Docker, Docker Compose, Jenkins, GitLab, Terraform.

Professional skills

SKILLS		EXPERIENCE IN YEARS	LAST USED
Programming languages	**Python**	5	2024
Backend	**FastAPI**	3	2024
	Django	3	2024
	Django Rest Framework	3	2024
	Flask	4	2023
	SQLAlchemy	5	2024
	Marshmallow	2	2021
	Alembic	5	2024
	ElasticSearch	1	2024
	Pydantic	3	2024
	Celery	2	2023
Fraud detection tools	**CLEAR**	1	2024
Message brokers	**RabbitMQ**	2	2022
	Kafka	3	2024
	AWS SQS	3	2024
	Pub/Sub	2	2021
Cloud	**AWS**	3	2024
	GCP	2	2021
Databases	**PostgreSQL**	5	2024

SKILLS		EXPERIENCE IN YEARS	LAST USED
	Redis	4	2023
	MongoDB	1	2024
	DynamoDB	2	2023
	BigTable	2	2021
DevOps	Docker	5	2024
	Docker Compose	5	2024
	Kubernetes(k8s)	2	2023
	Jenkins	3	2024
	GitHub Actions	2	2023
	Terraform	2	2021
Source control systems	Git	5	2024
	Bitbucket	1	2024
	GitHub	2	2023
	GitLab	2	2021

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