Ambrose Tuscano

|ambrosetuscanojobs@gmail.com| +1 (443)-627-1151| Github | LinkedIn|

SKILLS

- **Languages & Tools:** Python, Java, SQL, TypeScript
- **Databases:** MySQL, PostgreSQL, MongoDB, DynamoDB, RDS, Redis
- **Frameworks:** SQLAlchemy, Mockito, Junit, Hibernate, Flask, Django, FastAPI, ReactJS, Spring Boot, Tensorflow.
- **AWS Services :** ECS, EC2, Lambda, Glue, Batch, Sagemaker, S3, RDS, SQS, SNS, Step Functions, Load Balancer, Athena, Quicksight, Kinesis Firehose, API Gateway, Cloudwatch, CDK, VPC Peering.
- **SDLC, DevOps & Agile**: Full SDLC Experience, Dockerization, Git Version Control, CI/CD Pipelines, Integration Testing & Canary Deployments, Requirements Analysis, Design Patterns & Principles, Agile, Test-Driven Development (TDD), Monitoring & Logging

PROFESSIONAL EXPERIENCE

Amazon ***Software Engineer [Onsite Advertising]*** **Arlington, VA | *May 2022 – Present***

- Designed and revamped an ETL (Extract, Transform, Load) service by leveraging AWS Lambda, resulting in the streamlined automation of product violation reporting in ad placement.
- Lead the successful migration of the Content Moderation REST API to AWS infrastructure, Implemented autoscaling using ECS and EC2 services and deployed Cloudwatch-based custom metrics for comprehensive monitoring resulting in significant cost reduction.
- Established secure cross-account connections with dependency services like RDS, adhering to industry-leading VPC best practices leading to enhanced data connectivity and improved collaboration.
- Implemented a reliable data backfill pipeline for efficient retrieval and processing of S3 bucket data updates by leveraging AWS services (Lambda, SNS, SQS, ECS, EC2, DynamoDB) to ensure seamless data flow.
- Lead the development and testing of a data pipeline using Step Function, Glue, and Batch job, improving efficiency and scalability.
- Optimized legacy code through effective refactoring techniques, incorporating CI/CD best practices into service pipelines and Enhanced logging and metrics for better observability.
- Actively engaged in on-call duties to ensure system reliability. Designed and implemented a comprehensive dashboard for efficient system monitoring.

Openrise ***Software Engineer*** **San Mateo, CA | *Feb 2022 – Apr 2022***

- Developed Python-based API calls for seamless integration with the Google Calendar API, enabling efficient data consumption.
- Implemented data pre-processing techniques and successfully ingested the processed data into a PostgreSQL database, ensuring optimal data organization and accessibility.

NXP Semiconductors ***Software Engineering Intern*** **San Jose, CA | *May 2021 – Aug 2021***

- Revamped the test suite using Python and Keras, applying advanced Machine Learning techniques in NLP and Unsupervised learning, leading to a 30% reduction in runtime and 50% less manual intervention.
- Developed a PyQt-based User Interface that automated the pre-processing of extensive data sheets, facilitating seamless querying and visualization of data graphs and enabling efficient analysis of business use cases

EDUCATION AND HONORS

University of Maryland, Baltimore County | *Master's of Science in Computer Science* ***December 2021***

University of Mumbai | *Bachelor of Engineering in Computer Science* ***May 2019***

KEY PROJECTS

Video Service [YouTube Clone]: **Firebase, Google Cloud, *TypeScript*,*Next.js*, *Express.js*, *Docker***

- Built a video platform with Next.js frontend, Express backends, Firebase, and Google Cloud for streaming, and storage.
- Combined Cloud Run and Functions with Pub/Sub, Storage, and Firestore to architect a robust video processing backend.

Diabetes Detection Service: ***FastAPI*, *Twilio*, *PostgreSQL*, *Docker*, *AWS*, *Postman***

- Developed REST API endpoints using FastAPI for Random Forest algorithm-based prediction functionality and account functionalities.
- Created a UI for seamless interaction with the APIs and Integrated Google Maps API to retrieve nearby hospitals data and utilized Twilio API for SMS and email updates.
- Dockerized the application for deployment on ECR and hosted it on EC2 cloud service, with PostgreSQL as the database.
- Utilized Postman for efficient API testing and validation, ensuring reliability and functionality of features and endpoints.

Sports Fantasy Application: ***Android Studio*, *Java*, *Python Flask*, *PostgreSQL***

- Implemented a robust web scraper utilizing Python to fetch game information from external sources and populate PostgreSQL.
- Created an Android application using Java, providing sports information and hosting a Football Fantasy tournament.
- Designed and implemented a dynamic Flask-based REST API, seamlessly connecting the database to the Android application. The API facilitated engaging features such as updates on popular sports, interactive Fantasy scoring mechanisms.

Peer to Peer Distributed File System: ***Sockets*, *Multi-threading*, *Python***

- Architected a Distributed System using TCP protocol, enabling seamless File CRUD operations across multiple P2P connected nodes.
- Implemented a robust failure resilient architecture by incorporating replication strategy and employing version control techniques.