PIYUSH JAGADISH BAG

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Looking for Full-Time Software Engineer opportunities starting December 2022 with F1 OPT visa sponsorship.

EXPERIENCE

Apple   Sunnyvale, CA
Software Engineer Intern, Summer 2022   Jun 2022 - Sep 2022
- Replaced Query built in ANTLR with custom Query developed using Golang and MongoDB Aggregation Pipeline and MongoDB Query Language, enhanced performance of Search API in Data Access Layer by 30%

Tata Consultancy Services   Mumbai, India
Software Engineer   Jul 2019 - Feb 2021
- Decreased product cost by 35% by moving application architecture to asynchronous streaming with Apache Kafka
- Enhanced microservices using gRPC for Authentication to handle 5K DAU users, communication of application with AWS SES
- Designed and wrote the code in Golang to log different host system event and alert information to Dynamo database

Full-Stack Web Developer   Dec 2016 - Jul 2019
- Improved front-end designing functionalities led to code optimization by 20%; leveraged React.js and JavaScript
- Led development of module to build the distributed architecture as per the client requirement and collaborated with experienced cross-disciplinary technology teams resulted in scale and speed up the Django admin application and Flask application by 25%
- Created Microservices and REST API utilizing Python to handle 10x inbound volume
- Developed a distributed Task Queue using Celery and Rabbit MQ to enable tasks in background while application continues to resolve other tasks

PROJECTS

gRPC based Golang Microservices | Nov 2020 - Feb 2021
Golang, gRPC, protobuf, TravisCI, Git
- Created server and client side code in Golang using protocol compiler gRPC Plugin and compared gRPC and REST API paradigm
- Constructed massively parallel systems with Go's concurrency model using Go routines and channels
- Formulated used types to future-proof code and reduce difficulty of refactors
- Implemented Unary, Server Streaming, Client Streaming Bi-Directional Streaming API

MERN Stack E-commerce WebApp Microservices | Jan 2020 - Oct 2020
React.js, Hooks, Next.js, Node.js, Express.js, MongoDB, Docker, Kubernetes, TravisCI, Jenkins, TDD, Typescript
- Developed and scaled a large, scalable E-Commerce app leveraging a collection of Microservices
- Solved concurrency issues in a distributed system environment and handled challenges in async, event-based communication between services
- Executed a custom event bus and documented and enforce structure constraints on events across microservices
- Designed a component tree that increased code reusability by 40%

EDUCATION

Santa Clara University   Santa Clara, CA
Master of Science in Computer Science, 3.8 / 4.00   Present - Dec 2022
Courses: Advanced Web Programming, Web Architecture and Protocols, Distributed and Multi-tier Systems

University of Mumbai   Mumbai, India
Bachelor of Engineering in Information Technology, 7.05 / 10.00   Aug 2012 - May 2016
Courses: Data Structures and Algorithms, Relational Databases, Object - Oriented Programming, Design Patterns

TECHNICAL SKILLS

Languages:	**Python / Go (Proficient)**, JavaScript, C/C++, Java
Frameworks:	**Flask / Django (Proficient)**, Node.js, React, Bootstrap, FastAPI
Databases:	**SQL - [Postgres, MySQL] (Proficient)**, NoSQL - [MongoDB, Cassandra]
Developer Tools and Other Technologies:	**Git (Proficient)**, Docker, Kubernetes, TravisCI, Amazon Web Services
Libraries:	**pandas (Proficient)**, NumPy, Matplotlib