TapadiyaMS@Gmail.com

# Shubham Tapadiya (he/him/his)

Cambridge, MA | Open to relocate

Portfolio: https://purushartha.net

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#### **PROFESSIONAL SUMMARY**

Results driven and motivated Software Engineer with demonstrated experience in full stack development. Productive in team and individual projects, showing expertise in design, development, and delivery of high-quality client solutions. Seeking to leverage proven leadership, achievements, and skills to ensure project success.

## **PROFESSIONAL EXPERIENCE**

## Software Development Engineer, Amazon Web Services (AWS) | Boston, USA

Aug 2021 – Present

- Delivered OpenZFS SAZ File Server to customers in a cloud environment on the FSx team
- Worked on the development of the highly available file system offering
  - o Enabled EC2 instances to configure DRBD resources for data replication between available nodes
  - Designed and developed API for OpenZFS file systems
  - o Performed Proof-of-concept (PoC) and performance testing for data synchronization between resource devices
- Improved operational posture by developing tools and procedures for operators
- Worked on scoping down the Service Linked Role (SLR) policies for increased security across all supported AWS regions
- Implemented security tests across FSx engines to ensure customer authentication in the FSx API
- Designed and implemented customer console experience for OpenZFS SAZ filesystem and developed internal operational website for tracking progress of Volumes and Snapshots which increased the efficiency for operators and customer by 90%
- Developed SQL queries to improve the database efficiency, reduce data load time and enhance performance
- Performed deep packet inspection using Wireshark to assist in testing and troubleshooting of EC2 instance server
- Mentored two interns to deliver CPU/Memory Utilization metrics in AWS CloudWatch and Scale Storage from Backups
- Operated on highly visible customer-facing issues such as kernel deadlock due to stuck Transaction Groups (TXGs) in quiesce state and handle file system creates due to Amazon Elastic Block Store (EBS) insufficient capacity
- Ensured development quality is being tracked and improved using testing frameworks like EasyMock and JMockit
- Utilized other AWS Services: EC2, EBS, CloudWatch, CloudFormation, CodeDeploy, SWF, S3, Secrets Manager, Lambda and VPC

#### Software Engineer (Non-Profit Volunteer), AJ Investment | Mumbai, India

Jan 2018 - June 2019

- Expanded an investment central control and configuration system that collated investors and company's information for utilizing capitals which contributed to overall profitability
- Deployed and optimized the application to run on Kubernetes which resulted in observable cost reduction
- Involved in team project for the development of pre-existing software to analyze current market investments
- Integrated and managed infrastructure and systems engineering and technologies using Kafka

# **EDUCATION**

## Master of Science in Computer Science, Binghamton University, State University of New York

Aug 2019 - May 2021

- Relevant Coursework: Database Systems, Operating Systems, Data Mining, Programming Languages,
   Design and Analysis of Computer Algorithm
- Certifications: AWS, MongoDB, Database, Python, Data Science

## Bachelor of Engineering in Computer Science, University of Mumbai

Sep 2014 - Jun 2018

#### **TECHNICAL SKILLS**

Programming Languages: Java, Python, Golang, C, C++, Bash Scripting, JSON, Regex Expression

MongoDB (NoSQL), MySQL (SQL), Postgres (SQL), H2 (Java SQL Database)

Web Technologies: HTML, CSS, Bootstrap, JavaScript, React.js, Node.js, REST API, Apache Tomcat

Performance Testing Tools: LoadRunner, Wireshark, Flexible IO Tester (FIO), EasyMock (Unit Test Framework)

Others: AWS, Git, Linux, Kafka, Docker, Kubernetes, Spring Boot, Maven, JIRA, Microsoft Office Suite

#### **ACADEMIC PROJECTS**

# Road Symbols Detection [OpenCV Library, Python]

May 2020 – Aug 2020

- Programed an application in Python to identify road symbols for maintaining safe driving conditions with the precision at 85%
- Applied OpenCV for image transformations with masking technique (bitwise operations) to focus on important part of the image
- Compared the processed image with set of road symbol images to correctly classify the label of it

## Hotel Accreditation and Sentimental Analysis with Machine Learning [Python-Google Colaboratory, NoSQL] Jan 2020 – April 2020

- Constructed an application which performed Multi-layer Perceptron, Support Vector Machine and K-Nearest Neighbor that gave the dominant aspects / labels of the reviews by the guests stored in database using NoSQL
- Implemented GridSearchCV, which perceived the best possible parameters for MLP Algorithm and that resulted in 92% of accuracy
- Applied VaderSentiment Library, to perform sentiment analysis on the reviews of the guests