# 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.

#### **TECHNICAL SKILLS**

**Programming Languages:** Java, Python, C, C++, Bash Scripting, JSON

**Databases:** MongoDB (NoSQL), Firebase (NoSQL), MySQL (SQL), Postgres (SQL)

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

Performance Testing Tools: LoadRunner, Wireshark, Flexible IO Tester (FIO), Easy Mock (Unit Testing)

Others: AWS, Git, Linux, Docker, Kubernetes (DevOps), Spring Boot, Maven, GitLab (CI/CD), JIRA (Agile)

## **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
  - Planned, designed and executed the development of a robust and scalable API for OpenZFS file systems, leveraging modern software development practices and principles
  - Conducted Proof-of-concept (PoC) and performance testing for data synchronization between resource devices
- Improved operational posture by developing tools and procedures that limit access to host instances, resulting in an 80% reduction in the risk of unintended changes in data or system configuration
- Worked on scoping down the Service Linked Role (SLR) policies for increased security across all supported AWS regions
- Authored and executed security tests on multiple FSx engines to ensure robust customer authentication within the FSx API
- Designed and implemented customer console experience for OpenZFS SAZ filesystem, and developed an internal operational website to track Volumes and Snapshots, increasing efficiency for operators and customers by 90%
- Optimized SQL queries to improve database efficiency and reduce data load time by 40%
- Performed deep packet inspection using Wireshark to assist in testing and troubleshooting of EC2 instance server
- Mentored two interns to deliver performance 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
- Implemented GitLab for version control and project management, facilitating streamlined coordination and organization of project tasks and code changes among team members
- · 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

# Philanthropic Software Engineer, 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
- Containerized the application using Kubernetes, resulting in improved scalability and fault tolerance and contributing to observed cost reductions
- Involved in team project for the development of pre-existing software to analyze current market investments

#### **EDUCATION**

Master of Science - 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: Database, Python

**Bachelor of Engineering - Computer Science** | University of Mumbai

Sep 2014 - Jun 2018

# **ACADEMIC PROJECTS**

## Road Symbols Detection [OpenCV Library, Python]

Jan 2021 – Apr 2021

- 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