Abhishek Bhave

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Education

Master of Science, Computer Science, University at Buffalo Aug 2018 - Feb 2020
Bachelor of Engineering, Information Technology, University of Mumbai Aug 2014 - Jun 2018

Skills

Programming: Python, C/C++, Node.js, React, Java, JavaScript, CSS, HTML

Database/ Cloud: MS SQL Server, SQLite, MongoDB, AWS, Azure, Docker, Hadoop, Git, Linux

Work Experience

Software Engineer 3, Juniper Networks Inc, Sunnyvale, CA May 2020 - Present

- Designed and developed high-performance SystemC software simulators for the BX and KX networking chips. Engineered a multi-threaded pure C++ simulator for the XT chip, enhancing its efficiency and performance.
- Achieved a remarkable performance boost, increasing the vBX simulator speed from 20 packets per second (pps) to an impressive 2300 pps, marking a substantial 115x improvement.
- Spearheaded the creation of Python and C++ tools to streamline the development process, empowering the team to work more efficiently. Established a robust build system for the simulator, ensuring smooth and reliable builds.
- Developed a comprehensive testing and regression framework to validate simulator accuracy and reliability.
- Led efforts to build and optimize the release pipeline for the simulator, enhancing the deployment process.

Software Engineer, LeanTaas, San Jose, CA Feb 2020 - April 2020

- Worked as a Software Engineer in the Data Engineering team on the iQueue for Infusion product.
- Developed backend APIs and services in Java and Scala to efficiently represent hierarchical relationships, enhancing data management capabilities.
- Implemented Python data processing scripts to serve healthcare customers across the United States, resulting in streamlined data operations and improved workflow efficiency.

Software Engineer Intern, Sodexo, Buffalo, NY Jun 2019 - Dec 2019

- Data archival enhancement to existing .NET core application thereby reducing query time by 40%.
- Automated the Azure deployment process for Retail Ranger infrastructure using ARM templates.

Projects

Simple Dynamo Database | *GitHub*

- Engineered a distributed key-value storage system for Android using Java, which guarantees high availability and linearizability. The system leveraged consistent hashing and chain replication techniques to maintain data consistency, even in the face of failures.
- Effectively handled concurrent read and writes to the system even under failures while ensuring that every read returns the most recent write.

Options Trade Calculator and Logging Tool | *GitHub*

- MERN stack application that enables users to manage and analyze options trades. It provides a user-friendly interface for recording trades, calculates returns analyzes historical option transactions.
- Created and consumed REST API's for operations like creating, updating, deleting and viewing options trades.

Movie Store E-Commerce Application | *GitHub*

- Implemented application using .NET, Entity Framework back end and Angular framework front end.
- Created and consumed REST API's for basic operations like creating, updating, reading movies and orders.
- Shopping cart feature implemented for application with ability to create and process orders.

Large scale Text processing with Hadoop Map Reduce and Apache Spark | *GitHub*

- Performed word count and word co-occurrence on data from Twitter, NYTimes API and Common Crawl.
- Used MapReduce for this computation and Tableau to visualize the results.

Relevant Coursework

Analysis of Algorithms, Data Intensive Computing, Introduction to Machine Learning, Distributed Systems, Advanced Machine Learning, Computer Security Data Structures, Databases, Object Oriented Programming, Operating Systems, Computer Networks