Sameer Shanbhag

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Software Engineer

Innovative Software Engineer with a flair for full-stack development and a proven track record in improving system quality and efficiency. Highly proficient with Python, CI/CD methodologies, and cloud infrastructure, adept at spearheading projects that enhance operational performance. Adept at uniting cross-functional teams across cultures to meet detailed project goals, I thrive in uncharted environments, swiftly adapting and learning to drive continuous innovation and maintain a cutting-edge industry presence.

Core Competencies

API Development | Web Development | Full-Stack Development | Machine Learning | Version Control
Code Review | Project Owner

Technical Skills

Languages

Python | JAVA | HTML5 | CSS3 | JavaScript | Type Script | PHP | C++ | C

Frameworks/Libraries

Angular | Django 3.0 | OSGi | Spring | jQuery | React JS | Spring | PyTest

Tools/Platforms

Docker | Ansible | Terraform | Kubernetes | Kafka | AWS S3 | Google Container Registry (GCR) | AWS IAM

Database

MongoDB | Google Fire store | MySQL | H2 | Amazon RDS | Redis

Version Control

GIT | Bit Bucket | Perforce

Professional Experience

Qualcomm Technologies Inc. **February 2021 - January 2024**

Engineer

Streamlined CI/CD testing processes, achieving a 60% cut in testing duration and 85% greater test coverage. Pioneered a Python audio quality metric tool, now integral to Qualcomm's testing suites, enhancing test precision by 80%. Fostered collaboration with diverse teams to align project requirements, ensuring stakeholder satisfaction and a 20% cost reduction.

Automated Test System

- Fostered cross-functional collaboration in scrum sessions to define project specifics, achieving stakeholder satisfaction and a 20% cost reduction.
- Engineered a Python-based CI/CD Automated Test system, deployed via Jenkins to the cloud, which slashed testing time by 60% and boosted coverage by 85%.
- Empowered developers to refine HiFi Audio DSP Algorithms pre-production, reducing failure rates by 60% through proactive test failure notifications.
- Leveraged expertise in Python, MongoDB, web technologies, and Docker for a seamless UI for test results, and utilized Jinja2 for robust report generation from MongoDB.

Audio Quality Library and Audio Logger

- Directed the development of a Python Audio Quality Library, translating Quality Analysis algorithms from MATLAB to Python, boosting audio test efficiency and precision by 80%.
- Applied Python and Matplotlib for data visualization in the migration process, availing these tools within the test team's Python environment and eradicating setup time by 100%.

- Innovated and led the creation of a comprehensive Audio Logging Library in Python, enabling live Matplotlib visualizations of audio states for optimized algorithm tuning and effective debugging.
- Advanced proficiency in Python was demonstrated by engineering an Audio Logging Library, granting customers refined control over algorithm tuning and leading to a 50% decrease in process gaps.

Loraine Labs **May 2019 - January 2021**

Software Developer

Spearheaded the delivery and support of the Integrated Genome Browser, leveraging Java with the OSGi Framework in collaboration with a team of developers and a professor.

- Proficiently launched an Appstore using the Python based Django Framework, enabling developers to create and publish IGB apps. Played a pivotal role in the comprehensive end-to-end testing and deployment on Amazon AWS EC2 with the use of Ansible and the subsequent integration with IGB for enhanced scalability.
- Engineered a Genome Dashboard web application using Python Flask and Vanilla JavaScript, employing Bootstrap as a UI Library. This application seamlessly interacts with the IGB Desktop Application to load pertinent Genome data.

Morgan Stanley **August 2016 - December 2018**

Software Developer (Consultant)

Led the delivery of an intelligent document organizer, reducing retrieval times by 90%. Developed an NLP tool, automating document sorting and cutting manual analysis by 80%. Co-created a website for contextual data analysis with advanced visualizations, enhancing data interaction and user experience.

- Led the development of a robust web application using Angular 6, HTML5, CSS, and Java based RESTful services in collaboration with a high-caliber team at Thomson Reuters (TRIT), employing Agile development practices.
- Utilized D3JS library to create meaningful data visualizations, significantly enhancing data analysis efficiency for Morgan Stanley analysts and reducing analysis time by nearly 50%, demonstrating strong programming and data visualization skills.
- Crafted a Machine Learning powered Proof of Concept (POC) to automate the detection of company name in business articles, utilizing Java and Python alongside libraries such as Stanford Core NLP and Apache Open NLP. Capitalized on AngularJS for the frontend to create an efficient and user-friendly web solution.
- Teamed up with the research team to fine-tune a Conditional Random Field (CRF) model, enhancing its accuracy through the incorporation of additional features and flags, resulting in highly relevant outcomes for the specific use case.

Project Experience

Multi-Cloud Bootcamp

TheCloudBootcamp.com **October 2023**

- **Industry-Specific Cloud Deployment**: Orchestrated multi-cloud architectures for a Luxury Hotel application using Terraform on AWS and Google Cloud, catering to thousands of active users.
- **IAM & Access Control**: Established secure programmatic interactions by configuring AWS IAM, ensuring the safety and efficiency of cloud resource access.
- **Containerization & Kubernetes**: Converted the hotel's local application with Docker and managed deployments via Google Container Registry; utilized Kubernetes for effective scalability and resource allocation.
- **Data Migration Expertise**: Transitioned vital data to Google Cloud's MYSQL via SQL dump and relocated local server files to AWS S3, maintaining consistent data availability for the hotel's expansive user base.
- **Superior Scalability & Resilience**: Employed Kubernetes auto-scaling to effortlessly handle fluctuating web traffic, guaranteeing uninterrupted service for the Luxury Hotel's vast clientele.

Education

Master of Science in Computer Science (MSCS),

University of North Carolina at Charlotte