Danish Vaid

Curriculum Vitae

(510) 940-3377 | danishvaid96@gmail.com | danishvaid.com

PROFILE

Software Development Engineer working in Full Stack development and designing highly scalable systems. Holds a bachelor's degree in Computer Engineering with a solid foundation in object-oriented design, micro-service architecture, and web development; supplemented with experience in planning, debugging, implementing, and maintaining systems.

PROFESSIONAL EXPERIENCE

Microsoft Corporation

Present | March 2021

Software Development Engineer II - Level 61

- Continuing to lead team's new "Engineering Excellence" vertical, jointly with manager, as the team's kubernetes and Azure infrastructure SME (subject matter expert)
- Building Version 2 of GiveWithBing front end experience using React, Less, and ASP.NET

March 2021 | Sept. 2019

Software Development Engineer - Level 60

- Leading team's new "Engineering Excellence" vertical, jointly with manager, as the team's kubernetes and Azure infrastructure SME (subject matter expert) to improve overall system performance and availability
- Rearchitected backend kubernetes schema and optimized services' resource utilization resulting in a capacity increase of 100% while simultaneously reducing cost by over 60%
- Incorporated non-sampled time-based metrics collection using Prometheus and Grafana services in our clusters with auto-provisioning, configuration generation, and optimal runtime structure; enabling product wide performance improvements and cost savings
- Redesigned and implemented the Docker build process to reduce disk usage by 75%
- Architected and wrote the team's Kubernetes config build process using "Kustomize"

Sept. 2019 | Aug. 2018

Software Development Engineer - Level 59

- Identified and fixed a processing error in our risk/fraud service saving the team $6K/month loss in revenue due to malformed messages
- Built data ingestion, aggregation, and calculation pipelines to collect and ingest user engagement data (view, clicks, scrolls, etc.) from Xbox app and web dashboard allowing better informed business decisions
- Redesigned data reconciliation to utilize distributed processing and parallel consumption resulting in a recovery speed up of over 90 times

UCSB Capstone Project (Aerospace Corp.) - Perception Engine

March 2018 | Sept. 2017

Team Scribe and Member

- Modified YOLO Convolutional Neural Network object tracker to filter and track only the desired object in a video
- Developed a Flask web application for user interface to our object tracker, including user creation, authentication, and management system
- Implemented Celery as an asynchronous job processor to allow scalability and concurrent use of a web server application instance

Appfolio Inc.

June 2017 | Sept. 2017

Software Engineering Intern

- Developed features in Ruby on Rails for an integration software, which enabled the sales organization to achieve a record sales month and improving prior revenue by 20%
- Upgraded company's "EmailTracker" application to an API based cloud solution as a step in establishing a service oriented architecture
- Built a Continuous Integration and Deployment pipeline for "EmailTracker" application using Docker Containers, TeamCity, and Amazon's EC2 Container Service with auto-load balancing and blue-green deployment to minimize downtime

NASA Ames Research Center

June 2015 | Sept. 2015

Software Engineering Intern

- Designed a JAVA-C wrapper class for a trajectory synthesizer program, resulting in a 60% optimization over the previous solution
- Engineered a script to re-implement and reflect any changes to the wrapper data structures

RESEARCH EXPERIENCE

University of California, Santa Barbara

Present | Sept. 2020

Volunteer Research Assistant

- Researching Intel SGX's overheard performance impact on growing datasets and randomized access
- Investigating SGX limitations with concurrent access and growing thread amounts

Winter 2018 | Spring 2017

Undergraduate Research Assistant

- Implemented a server-client architecture in C++ using Apache Thrift
- Optimized performance time and reduced data size by 20% using variable byte and delta compression methodologies

EDUCATION

University of California, Santa Barbara

B.S. Computer Engineering, June 2018

Relevant Courses Taken:

- Distributed Systems
- Artificial Intelligence & Machine Learning
- Operating System
- Deep Learning & Neural Networks
- Data Structures & Algorithms
- Object-Oriented Design & Implementation

Stanford University (Center for Professional Development)

Graduate Certificate: Advanced Software Systems, Expected Spring 2022

Relevant Courses Taken:

- Computer Organization and Systems (CS107)
- Introduction to Cryptography (CS255)
- Advanced Topics in Operating Systems (CS240)

SKILLS

- Proficient Programming Languages: C#, Python
- Prior Experience Programming Languages: Java, C++
- Technologies: Kubernetes, Azure, Docker
- Frameworks: ASP.NET, React, Flask
- Web Development Experience: HTML, CSS, JavaScript, Bootstrap