

Khoa Nguyen

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Technical Skills

Languages: Java, Python, JavaScript, ReactJS, NextJS

Tools: Kubernetes, Azure DevOps, Grafana, Git, Docker, Akka, Apache Pulsar, Kafka, MongoDB, Cassandra, Redis.

Experiences

General Motors

Austin, TX

Software Developer

Jan, 2021 – Present

- Develop and maintain high-throughput, low-latency data streaming Java applications for North American fleets.
- Enhanced production stability by effectively identifying and resolving bugs, while also implementing quarterly bug fixes and performance enhancements.
- Significantly reduced costs for GM by 30% by providing in-house support and guidance for Akka framework, eliminating the need to pay for external support services.
- Train team members to boost their proficiency and confidence in managing production incidents, thereby resulting in overall operational excellence.
- Manage and actively curate team's documentations to facilitate effective knowledge sharing and ensure seamless workflow processes.
- Support junior developers in their integration into the team by familiarizing them with the team's day-to-day operations and resolving any technical issues they encounter.

UCI Medical Center

Irvine, CA

Web Developer

Oct, 2020 – Jan, 2021

- Maintained and upgraded Radiology department website using PHP and WordPress features.
- Implemented creative solutions to promote knowledge sharing and streamline communication within the department, fostering a more collaborative and productive work environment.
- A/B tested various layouts to improve user experience for medical students and residents.
- Collaborated across multiple teams to successfully achieved deadlines and expectations.

Technical Projects

High Speed Data Streaming | General Motors

- A Java-based application that leveraged Akka and Apache Pulsar for end-to-end data streaming, with a primary emphasis on high-throughput and low-latency.
- Improved latency significantly when interacting with Cassandra database by implementing Redis cache with features to prevent outdated persistent data.
- Developed and deployed bug fixes to the production environment while also set up critical metrics, alerts, and Grafana dashboards for issue tracking.
- Engaged in collaborative efforts across multiple teams to facilitate knowledge sharing and meet evolving application upgrade needs effectively.

Spring Boot Data Streamer | General Motors

- Implemented an UDP streaming feature and Avro Pulsar feature, which expanding our end-to-end testing capabilities to several applications.
- Designed an Azure CI/CD pipeline with Docker to build and deploy application in Kubernetes environment.
- Refactored and optimized code to ensure stable, high-throughput connections with non-production servers.
- Engineered a scalable solution that empowers the application to transmit up to 500,000 messages per second, complete with configurable variables to adapt to various requirements.

German Football Data Analyzer | Personal Project

<https://german-futball.herokuapp.com>

- Back-end project that parse, calculate, and display analytical data.
- Developed with Angular, MongoDB, Material UI, Node.js, Express.
- Created Node RESTful API's and data models from CSV football's data.
- Engineered scalable Angular front-end components to enhance user experience.

Education

University of California, Irvine

Bachelor of Science, Computer Science

Irvine, CA

March, 2020