Kevin Dong

| kefan.me
| github.com/k27dong
| me@kefan.me

skills

Languages:

C/C++, Rust, Python, Java, JavaScript, SQL, R, CUDA-C, Verilog, VHDL

Technologies:

AWS, Azure, Node.js, React.js, Spring Boot, Docker, K8S, Nginx.

RTOS, Compilers, Computer Networks, Computer Security, Adaptive Algorithms

open sources

kotetsu |

An automated IoT solution using RPi and EPD written in pure C. Utilized libcurl for API integration and GSheets as a cloud database. Managed data rendering via SPI interface and generation of bitmap graphics.

kefan.me |

Full-stack web app built with React and Flask, containerized with Docker and Nginx, deployed to GCP with K8S.

Bamboo |

High-performance music streaming plugin for Discord, effectively catering to over 800 servers.

work experiences

Autodesk | Software Engineer

Toronto, Canada • Sep - Dec 2022

- Collaborated on a legacy API migration using Java Spring Boot, optimized Fusion 360 Manage performance through caching mechanisms and Elasticsearch integration, enhancing backend response times.
- Conducted comprehensive testing of backend endpoints and services with JUnit and Jenkins.
- Implemented robust API security measures, ensuring data integrity.

BetterUp | Software Engineer

San Francisco, United States • Jan - Apr 2022

- Independently designed and implemented data pipelines for users' profile pages with Ruby on Rails and Ember.js.
- Revamped the onboarding process for user appointment management with Memcached and PostgreSQL, resulting in a more streamlined process and an improved user experience.
- Steered the transition from legacy JSP and jQuery frameworks to GraphQL, modernizing the application infrastructure.
- Expanded unit test converge to 80% with RSpec and SemaphoreCI.

CIBC | Software Developer

Waterloo, Canada • May - Aug 2020

- Developed full-stack web application with Flask and React.js.
- Deployed containerized applications on AWS using Docker and Nginx, utilizing Dockerfile optimization and multi-stage builds to minimize image sizes, enhancing deployment efficiency.
- Designed a multi-threaded media pipeline with CUDA, enabling GPU acceleration for H264 video encoding and conversion, which led to a significant reduction in CPU usage by 30%.

education

University of Waterloo

Bachelor of Applied Science - BASc
Computer Engineering 2018 - 2023