

WORK EXPERIENCE

AWS | SOFTWARE DEVELOPMENT ENGINEER

Santa Clara, CA | Feb 2020 - Present

- Leading, developing and driving engineering, infrastructure and operations of a serverless SaaS product, AWS Tier 1 service.
- Built microservice architecture and **ETL streaming data pipeline** to solve data engineering problem at scale by batching millions of message and de-duplicate records, which saved more than **40%** operational cost monthly in all prod regions.
- Designed and built auto scaling algorithm to process millions of distributed messages at high concurrent rate in async way, which optimized the solution of scale up/down serverless instances and saved more than 20% operational cost monthly in all prod regions.
- Designed and built distributed system to detect bad actor events and rate-limit high frequency of events and accounts, which lower the pressure of downstream ETL data pipeline service and uniformly deliver resources across all customer within committed **SLA**.
- Resolved more than 200+ customer ticket and Implemented monitoring and analytical OE dashboard to track process metrics and identify opportunities for further optimization.
- Collaborated with cross-functional teams, including software developers, product managers, and business stakeholders, to execute on product vision and strategy, ensuring successful delivery of products that meet user needs and drive business growth.

AKZ EINK | SOFTWARE ENGINEER

Shanghai, China | Dec 2016 - Jan 2020

- Supported Eink core UI Infrastructure and implemented cross platform of end-to-end Eink UI fundamental components in **React Native** framework using **C++**, **GTK**, **Cairo Graphics** and **React TypeScript**.
- Rewrote 30K+ C++ lines to migrate old Java navigation application to Modern C++ and reduced overall 30% memory consumption as well as paying off significant tech debt by refactoring the small components and deprecating 5K+ lines of legacy code.
- Led in designing the brand new Eink full-stack search application and implemented independent client's provider modules using C++ and React TypeScript.
- Implemented cache logic and optimized the efficiency of search query which reduced **p99 search latency more** than 30% and avoided unnecessary traffics between services and application.
- Designed the sign-off test framework and set up CI/CD pipelines including to hook up test cases in each custom stage and used AWS S3 to store build and debug logs, which against each code's commit being push to production and also guard every release cycle.
- Worked closely with **Product Manager** and **UX Designer** to determine new feature of product and identify opportunities to improve the user experience.

EDUCATION

B.S. Computer Science | Texas A&M University

College Station, TX | Dec 2016

Teacher Assistant (TA): Operating System & Data Structures and Algorithms

SKILLS

Proficient: C++, C, JavaScript, Java, Python, TypeScript, React, React Native, CMake, Ant, Git

Exposure: SQL, Dagger, Spring, Hibernate.

AWS development: S3, DynamoDB, Lambda, CloudWatch, APIGateWay, CloudFormation, IAM, EventBridge, SQS, Kinesis, Glue, SNS