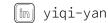# Yiqi Yan

Software Engineer

🏠 saoyan.github.io   🐙 SaoYan   in yiqi-yan

Work Experience

APPLE SERVICE ENGINEERING | Soware Engineer

May 2022 – Present | Vancouver, Canada

Highlighted skills: Java, Spring, Kubernetes, Solr, Cassandra, PostgreSQL, GraphQL, Project Reactor

- → Worked in the team developing the content management systems for TV contents, including movies, episodes, sports, and live streams.
- → Migrated all services to container, improved deployment workflow and service scaling capability.
- → Implemented a micro service responsible for streaming, parsing, indexing, and querying metadata that are submitted in XML format.
- → Supported new features for launching MLS live game in the TV App.

AWS KINESIS DATA STREAM (KDS) | Soware Engineer

Aug. 2020 – April 2022 | Vancouver, Canada

Highlighted skills: Java, Guice, Protobuf, DynamoDB, CloudWatch, Cloudformation, KMS

- → Migrated the proxy service from JDK8 to JDK11, and tuned JVM garbage collectors. Ran load testing and benchmarked upon various hardware categories. Improved throughput by around 20%
- → Participated in the overall design of KDS's new backend storage layer. Owned the design and implementation of the control plane that manages KDS data storage resources.

AMAZON PRIME VIDEO | Software Engineer Intern

July 2019 – Oct 2019 | Seattle, U.S.A

Highlighted skills: Typescript

- → Streaming Segment Parser: Designed and implemented an asynchronous ISO-BMFF video segment parser, making it capable of handling streaming data.
- → Improved time-to-first-frame by around 20% compared to the previous synchronous implementation.

Publications

- → **Yiqi Yan**, Jeremy Kawahara, Ghassan Hamarneh, Melanoma Recognition via Visual Attention In International Conference on Information Processing in Medical Imaging (IPMI), 2019.
- → **Yiqi Yan**, Lei Zhang, Jun Li, Wei Wei, Yanning Zhang, Accurate Spectral Super-resolution from Single RGB Image Using Multi-scale CNN In Chinese Conference on Pattern Recognition and Computer Vision (PRCV), 2018.

Research Projects

MELANOMA RECOGNITION BASED ON VISUAL ATTENTION

Sep. 2018 - Dec. 2018 | Burnaby, Canada

- → Proposed an attention-based method for accurate melanoma recognition. The attention modules, which are learned together with other network parameters, estimate attention maps that highlight image regions that are relevant to lesion classification.
- → Paper published: **Yiqi Yan**, Jeremy Kawahara, Ghassan Hamarneh, Melanoma Recognition via Visual Attention In International Conference on Information Processing in Medical Imaging (IPMI), 2019.

Skills

PROGRAMMING

Proficient:
Java • Python

Experienced:
JavaScript • TypeScript

LIBRARIES/FRAMEWORKS

Spring • Guice • Protobuf
Solr • Cassandra • PostgreSQL
GraphQL • Project Reactor
Docker • Kubernetes

AWS

Kinesis • DynamoDB • S3
CloudWatch • CloudFormation
IAM • KMS

Education

SIMON FRASER UNIVERSITY

M.Sc. in Computer Science
2018 - 2020 | Burnaby, BC, Canada
Medical Image Analysis Lab
Cum. GPA: 3.84 / 4.33

NORTHWESTERN POLYTECHNICAL UNIVERSITY

B.Eng. in Communication Engineering
Sep. 2014 - July 2018 | Xi'an, China
School of Electronics and Information
Cum. GPA: 88.75 / 100