Yiqi Yan

saoyan.github.io SaoYan yiqi-yan

Work Experience

APPLE SERVICE ENGINEERING | Sofware Engineer

May 2022 – Present | Vancouver, Canada

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

- Worked cross teams developing the infrastructure and content management systems supporting TV App 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.
- Participated in designing and developing the next generation metadata change request infrastructure.

AWS KINESIS DATA STREAM (KDS) | Sofware 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.

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