

# Yiqi Yan

Software Engineer

 saoyan.github.io  SaoYan  yiqi-yan

## WORK EXPERIENCE

### APPLE SERVICE ENGINEERING | SOFTWARE ENGINEER

May 2022 – Present | Vancouver, Canada

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

- Worked in the team developing and maintaining the content management tools for TV contents, including movies, episodes, sports, and live streams.
- Migrated all services to container, improved deployment workflow and service scaling capability.

### AWS KINESIS DATA STREAM (KDS) | SOFTWARE 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