

# Yiqi Yan

Software Engineer

 saoyan.github.io    SaoYan    yiqi-yan

## WORK EXPERIENCE

### APPLE MEDIA PRODUCT | SOFTWARE ENGINEER

May 2022 – Present | Vancouver, Canada

Highlighted skills: Java, Spring, Protobuf, Docker, Kubernetes, Solr, Cassandra, GraphQL

- Worked in the team developing and maintaining the content management service for TV contents, including movies, episodes, and sports.
- Migrated all services to container, improved deployment workflow and service scaling capability.
- Supported the launch of MLS game live streaming on Apple TV app (2023 Spring).

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

Aug. 2020 – April 2022 | Vancouver, Canada

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

- 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 20%
- Participated in the overall design of KDS's new backend storage layer.
- Designed and implemented the control plane of the new backend that manages KDS data storage resources.

### AMAZON PRIME VIDEO | SOFTWARE ENGINEER INTERN

July 2019 – Oct 2019 | Seattle, U.S.A

Highlighted skills: Typescript

- Intern Project: Streaming Segment Parser ([Webpage](#))
- Re-designed the ISO-BMFF video segment parser. The new design turns the previous synchronous parsing process into asynchronous, making it capable of handling streaming data.
- Implemented the new parser using TypeScript via event-based architecture and improved time-to-first-frame by around 20%.

## RESEARCH PROJECTS

### MELANOMA RECOGNITION BASED ON VISUAL ATTENTION

Sep. 2018 - Dec. 2018 | Burnaby, Canada

- [Project Webpage](#)
- 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:

Ruby • JavaScript • TypeScript

### LIBRARIES/Frameworks

Guice • Protobuf • Spring

Solr • Cassandra • GraphQL

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