# Yiqi Yan

Software Engineer

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## Work Experience

### APPLE MEDIA PRODUCT  | Sofware Engineer

May 2022 – Present | Vancouver, Canada
Highlighted skills: Java, Spring, Protobuf, Docker, Kubernetes, Solr, Cassandra

→ Worked in a team developing and maintaining the content management service for TV contents, including movies, episodes, and sports.
→ Migrated the backend service to container, improved deployment workflow and service scaling capability.
→ Added support for managing event based streaming contents, such as MLS sports live coming online in 2023.

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

Familiar:
C/C++ • Go • SQL

### LIBRARIES/FRAMEWORKS

Guice • Protobuf • Spring • OpenCV • PyTorch • Tensorflow

Solr • Cassandra

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