

YUXUAN YANG

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Skills

LANGUAGES

Java
Python
JavaScript
Scala
nodeJS
PHP
CSS/HTML
C++
C

FRAMEWORKS&TOOLS

Apache Flink
Apache Spark
Spring
Hibernate
AngularJS
Bootstrap
KAFKA
AWS
Google Cloud
React
OpenCL

METHODOLOGY

AJAX
Neural Networks
Deep Learning
Functional Programming

Education

University of Waterloo
Computer Engineering

Udacity
Nanodegree Program Deep
Learning Foundation

Employment

360 Education Lab

Software Developer

Toronto, Ontario, Canada
Sept. 2019 to Current

Technology Involved: WebRTC, React, AWS S3, EC2, MySQL, Java
Maintained a video conference platform by leveraging WebRTC.
Implemented a view listing all participants with multiple related statuses.
Implemented a stable and extensible real-time audit trails system for the platform.
Implemented a feature for attendees raising hands to the presenter and related information broadcasting.

SSIMWAVE Inc

Real-Time Streaming Analytics

Waterloo, Ontario, Canada
Jan. 2019 to Apr. 2019

Technology Involved: KAFKA, Apache Flink, AWS, MemSQL, YAML, JSON, Bazel, Ansible.

Built and deployed a Recommendation Video Bitrate streaming engine handles raw data in real-time on production.

Designed and implemented the high-performance data ingestion backend system on production.

Implemented End-to-End testing and integration testing.

Collaborated with the research team on the recommended bitrate algorithm.

Ultimate Software

Software Developer

Toronto, Ontario, Canada
Apr. 2018 to Aug. 2018

Technology Involved: Spring Boot, JPA, Hibernate, AngularJS, Liquibase, MarioDB, RabbitMQ, Maven, Git.

Implemented a feature calculating payroll based on different time off events.

Researched and improved database performance issues.

Maintained migration scripts for altering database tables.

Implemented RESTful APIs to handle different events to the user's timesheet.

NCR

Software Engineering

Waterloo, Ontario, Canada
Sept. 2017 to Dec. 2017

Technology Involved: Hibernate, SpringMVC, JSF frameworks, Junit, SQL SERVER, JavaScripts, AJAX, SSO, SAML, Glassfish, Tomee, Maven, Ant, SVN

Worked on different server applications that integrate scanning, processing, persisting bank check input from different devices

Implemented a complex and high-performance feature on the management server enabling scanner driver devices to upload logs to the Capture Server by batch and pooling its status asynchronously.

Designed a table to read and write large binary files efficiently.

Added different loggings for handling errors from ATMs, and desktop scanners.

Effective Agile teamwork with business analysts, senior engineers, technical writers, and product managers.

Bronte College of Canada

Software Developer

Mississauga, Ontario, Canada
Jan. 2017 to May 2017

Technology Involved: MySQL, JavaEE, ICEfaces(JSF framework), Tomcat 7.

Added a functionality sending notification emails filtered by roles and events.

Maintained development of Bootstrap, AngularJS frontend and PHP backend dynamic database driven websites.

Projects

C++ PERFORMANCE IMPROVEMENT

May 2019

- Using OpenMP to speed up N-Queen problems. With 14 threads, speed-up is 10x
- Using OpenCL GUP to stimulate Coulomb law and speed up computation up to 20x
- Using OpenCL GUP to speed up cracking JWT token up to 10x

CRYPTOCURRENCY TRADING PLATFORM

Apr. 2018 to Sept. 2018

- A mock exchange platform where users are able to buy and sell by different coin pairs.
- NodeJS, AngularJS, Redis, PregresSQL.

BIKE SHARING RIDES PREDICTOR

Sept. 2017

- Build a neural network from scratch to predict bike sharing rides. Organize dataset into a train set, validate set and test set. Implemented gradient descent and backpropagation.
- Python, numpy, pandas.

BACKGROUND MANAGEMENT SYSTEM

Sept. 2016

- An application used to manage users (CRUD) and update blogs.
- Spring, Hibernate.