

ANDY YAO

SOFTWARE ENGINEER LEAD

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SUMMARY

Andy is a software engineer with 3+ years experienced in software development, databases, distributed systems, and capital markets. Andy has worked in front-office and middle-office technology teams, interacting with Sales/ Trading and Operations alike.

Andy is a Canadian citizen, and speaks English, Mandarin, Spanish.

EMPLOYMENT

RBC Capital Markets, Software Developer, Toronto, Canada

July 2019 - Current

Risk Watch

- Lead the fix income risk dev. team for FRTB, responsible for maintenance and enhancement of Riskwatch risk sensitivity service.
- Cut batch application run time by 30% by removing bottlenecks, code refactoring
- Mentor new grads and junior developers on the team
- Environment Java Spring, Hadoop, Spark, HDFS, SQL Server, RHEL

FICC Cash Analytics

- Transition the fix income pricing library to modern C++ tool chain
- Created a web tool used by desk quants to quickly access pricing results from several internal / external pricing libraries, allowed faster pricing error recognition
- Environment Python, React ES6, Nginx, Elasticsearch, C++, RHEL, Windows

GELP Structured Notes

- Created custom python solutions to map RBC structure notes to market vendor's format. Allowed six category of structure notes to be published to new vendor platforms.
- Engage directly with structurers, quants, and sales across Toronto, New York, and London.
- Environment Java, Python, AngularJS, Jenkins, SVN, RHEL, FpML

DMG Blockchain, Software Engineer, Vancouver, Canada

Oct. 2018 - June 2019

- Lead developer for IoT (internet of things) software system to control and monitor bitcoin miners
- Created alerter systems for notifying onsite technician on out of service miners.
- Mentored junior developers / co-ops.
- Environment Git, AWS tools (EC2, ECS, S3), Docker, Python Flask, React, NodeJS, Kafka, Influx, Grafana, Postgres

RBC Capital Markets, Technical Systems Analyst Co-op, Toronto, Canada

May 2017 - Aug. 2017

- Implemented continuous integration, continuous deployment (CICD) using Jenkins to automated software deployment
- Prototyped an algorithm recommendation system for recommending articles to clients
- Created / modified SQL Server stored procedures for business analyst and QA
- Extract, Transform, Load (ETL) using SSIS tool to provide data for other business units
- Environment C# ASPnet, SQL Server, SVN

Wood Group, Application Developer, Vancouver, Canada

May 2017 - May 2018

- Created Access database for automation through VBA, improved report accuracy saving estimated 200 man hours yearly.

Engineer Cost Controller

May 2013 - Sept. 2016

- Monitored financial status of multiple engineering, procurement, and construction projects
- Prepared project status and financial reports for company's project managers

SKILLS

LANGUAGES: C++, Python, ES6 Javascript, Java, Bash Shell

OS: Linux, Window

TOOLS / IDE: Visual Studio, git / SVN, Vagrant, Postman, Docker, Hyperledger, AWS S3, EC2, Postgres, tmux

FRAMEWORKS: Spring, React, Fabric, NodeJS, angularJS

EDUCATION

Simon Fraser University

B.Sc Computer Science 2018
Burnaby BC, Canada

Queen's University

BA Economics 2012
Kingston ON, Canada

Canadian Securities Course

2015

PROJECTS

Blockchain Aviation Challenge

Aug. 2018 - Sept. 2018

<https://github.com/AndyCYao/AeroSmartDemo>

- Created baggage tracking network proof of concept for Lufthansa SAP aviation challenge
- Technology used, Docker, Hyperledger Composer

Interplanetary File System (IPFS) Rest API

Aug. 2018 - Sept. 2018

<https://github.com/AndyCYao/IPFS-Rest-API>

- Developed API endpoints for file upload to IPFS nodes
- Created JSON Web Token (JWT) service for user authentication
- Technology used, Docker Containers, SQLite, Python Flask, Postman