

JONATHAN XUE

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SKILLS

LANGUAGES: Java, Python, C#, C++, Javascript

TECHNOLOGIES: Jenkins, Docker/Kubernetes, .NET, Maven, Kafka, ReactiveX, Hadoop, Git, SQL (MySQL, SQL Server, Postgresql), MongoDB, Node.js

SCHOOL: Distributed Systems, Security, Reinforcement Learning, Programming for performance

EDUCATION

University of Waterloo

2015 - 2020

Bachelor of Applied Science - Honours Computer Engineering

EMPLOYMENT

IBM, Full Stack Developer

Sept. 2019 - Dec. 2019

Created guides for OpenLiberty, an open-source framework for building cloud-native Java microservices

Wrote guide for creating a reactive application with OpenLiberty, RxJava and Jersey. Also wrote guide for setting up a Kafka cluster in an OpenLiberty application.

Maintained and designed tools for monitoring traffic and other metadata for the entire organization's guides

IBM, Security Software Developer

Sept. 2018 - Dec. 2018

Designed employee lookup tool that uses data from an input file to extract data from internal employee database; Tool created with Python

Created a tool to automate the approval process of the usage of third-party libraries using Python and Jenkins

Integrated automatic reminders for Zenhub tasks using Slack and Jenkins

Finastra, Developer

Jan. 2018 - Apr. 2018

Wrote file import and export service using C#

Automated validation of user inputs into database

Refactored tests using Entity Framework

SM Research, Software Developer

May 2017 - Aug. 2017

Created software of new model of PCR (Polymerase Chain Reaction) machine using WPF/.NET

Designed custom user controls that model real-world lab equipment such as a data grid that models a 12x12 tray of test tubes

Began integration of MVVM architecture to the entire project

RBC, Technical QA Analyst

Sept. 2016 - Dec. 2016

Planned solutions to reduce space constraints in test environment, freeing 2 TB of storage in Teradata database

Automated test setup and execution for QA team

PROJECTS

Garden Sentry

2019 - 2020

Automated turret that fires water at rabbits in a garden

Rabbits are detected with a computer vision module (OpenCV)

Clips of firing event are uploaded to cloud bucket and saved

jX Engine

2020

I'm making my own 2D game engine for my game

The engine is written in C++ with SDL2 and supports all sorts of things like custom UI and real-time physics

You can check out the code on my Github!