

JONATHAN XUE

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EDUCATION

University of Waterloo

2015 - 2020

Bachelor of Applied Science Computer Engineering

EMPLOYMENT

IBM, Full Stack Developer

Sept. 2019 - Dec. 2019

Created guides for OpenLiberty, IBM's 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.

Designed and maintained 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 retrieves employee data from internal employee portal.

Created a tool to automate the approval process of the usage of third-party libraries in IBM production code.

Built a bot that generates automatic alerts on Slack for Zenhub stories approaching deadline.

Finastra, Developer

Jan. 2018 - Apr. 2018

Implemented features on file import system for Finastra's repossession services in C#/ASP.NET.

Created validation for user inputs into SQL Server database.

Refactored ~80% of integration tests with Entity Framework.

SM Research, Software Developer

May 2017 - Aug. 2017

Created user-facing 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 restructuring of application into MVVM

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 E2E test setup and execution for QA team.

SKILLS

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

TECHNOLOGIES: Jenkins, Docker/Kubernetes, .NET, Maven, Git, SQL (MySQL, SQL Server, Postgresql), OpenGL

SCHOOL: Security, Programming for performance, Operating Systems, Embedded Systems

PROJECTS

Garden Sentry

2019 - 2020

Detects rabbits in camera frame using a computer vision module (OpenCV) and fires water at them to scare them away.

Footage of firing event is then saved, uploaded to cloud bucket (GCP) and posted on a website.

jX Engine

2020

2D game engine that will eventually power my own game

Written in C++ with OpenGL and SDL2 and supports all sorts of things like it's own renderer, custom UI and physics engine.

You can check out the code on my Github!