



Alec Yu

Software Engineer



N54W14367 Vera Lane
Menomonee Falls, WI 53051



414-915-9858



github.com/alecyuverymuch



alecxisxhere@gmail.com

Skills

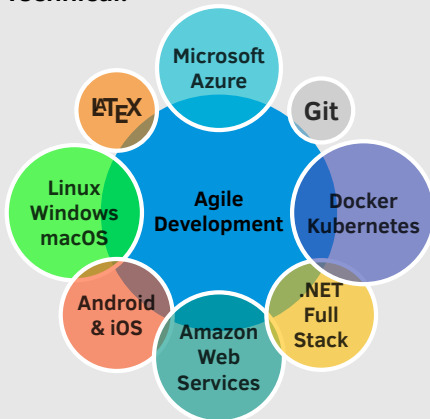
Development:

Java, C#, PowerShell

Matlab, Python, SQL

C, GO, Javascript

Technical:



Relevant Classes:

- CS 354 - Machine Organized Programming
- CS 367 - Data Structures
- CS 435 - Cryptography
- CS 524 - Optimization
- CS 532 - Theory of Pattern Recognition
- CS 536 - Compilers
- CS 540 - Artificial Intelligence
- CS 564 - Database Management Systems
- CS 577 - Algorithms
- ENG 601 - Internet of Things Lab

Languages:

- English: Native Speaker
- Mandarin: Conversationally Fluent

Education

University of Wisconsin - Madison
College of Letters and Sciences
 Bachelor's in Computer Science
 Minor in Mathematics

Madison, WI
 Aug. 2014 - May. 2018
 GPA: 3.24

Experience

Johnson Controls Inc.
Software Engineer

Milwaukee, WI
 May. 2017 - Now

Advanced Development (Internship) — Central Plant Optimization:

- Learned under senior developers to acquire knowledge in collaborative software product development such as the Agile Development workflow and writing maintainable, peer-reviewed code.
- Contributed to an ASP.NET Web Application running a model-predictive control software for energy plant management and optimization.
- Established a small-scale demo environment for marketing use.

Advanced Development — Metasys Modernization:

- Executed a Proof of Concept project involving redesigning a monolithic legacy product into a micro-services architecture.
- Containerized third-party services with Docker/Kubernetes.
- Implemented a new DAL with RPC and REST APIs for communicating time series data with other containerized services.
- Developed PowerShell scripts for latency/load testing the APIs, DAL, and micro-services to document results.

Advanced Development — Variable Refrigerant Flow Calculation Platform:

- Developed a cloud-based data platform for a model-predictive control application managing HVAC systems with Microsoft Azure.
- Utilizing multiple Azure resources, deployed a scalable cloud hosted platform for storing customer site models, managing equipment data, and running optimization algorithms.
- Designed equipment health monitoring pages and data trend graph elements in the ASP.NET Web Application UI.

Johnson Controls - Hitachi, IoT Development — Air Cloud Pro/Home

- Coordinated with overseas development teams in China, Japan, and India to launch a collaboration project.
- Engineered an AWS based IoT Hub for a cross-platform application for monitoring and controlling HVAC systems.
- Implemented a data collection and streaming service leveraging resources from AWS such as Fargate, Kafka, Kinesis, and Lambda.

Projects

Squirefeed

gBeta - Startup

Madison, WI
 Mar. 2016 - Oct. 2016

- Initiated a startup business providing an online platform to connect local chefs and small businesses to hungry students on UW Madison's campus.
- Applied Bootstrap and Ruby on Rails to create a web store.

Security and Privacy Using Blockchain

UW Madison Internet of Things Lab

Madison, WI
 Aug. 2016 - Dec. 2016

- Demonstrated Blockchain's decentralization, node consensus, data integrity, and immutability utilizing IBM's Bluemix Blockchain network.
- Deployed Chaincode written in GO with Hyperledger Fabric to simulate the communications of IoT devices as transactions in the Blockchain ledger.