

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
- · ENGR 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 qRPC and REST APIs for communicating time series data from the DAL to 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.
- Maintained API data services in the ASP.NET Web Application UI.

Johnson Controls - Hitachi — Air Cloud Pro/Home

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

Projects

Squirelfeed

Madison, WI Mar. 2016 - Oct. 2016

- gBeta Startup - 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

Madison, WI

UW Madison Internet of Things Lab

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.