# Cullen LaKemper

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# Education

### Rose-Hulman Institute of Technology, Terre Haute, IN. - Expected Graduation Date: 05/2022

Bachelor of Science, Computer Science with Minors: Japanese, Mathematics, and Electrical and Computer Engineering GPA: 3.58

#### Kanazawa Institute of Technology, Nonoichi, Japan - Summer 2019

Summer Program in Japanese, Study Abroad Program

**Highlighted Coursework:** Data Structures and Algorithms, Design and Analysis of Algorithms, Software Requirements Engineering, Software Design, Intro to Web Development, Intro to Database Systems, Practical Security 2, Japanese 1-6

# Experience

## S.O.S. Challenge Participant - Techpoint - Indianapolis, IN. - 06/2020-07/2020

• Worked in a team to design and prototype a software product to alleviate issues with education during the COVID-19 pandemic

## Drafting Technician - Morton Buildings Inc - Morton, IL. - 09/2017-05/2018

- Drafted building plans using AutoCad for buildings of various designs and styles, and checked plans for less experienced Drafting Technicians to ensure quality and accuracy of plans
- Communicated directly with salesmen and structural engineers through email, telephone, and in person regarding project plans, scheduling, and other design details

## Skills

Languages: Java, Python, Bash, HTML/CSS/Javascript, C/C++, SQL, MATLAB

Tools: Linux and related tools, Git, Nodejs and other backend tools, Various IDEs

Hardware: FPGA boards, Arduino, Raspberry Pi, Computer Architecture and Processor Design, Circuit Design

Development: Algorithm Design, Data Structures, Software Requirements Engineering, Object Oriented Software Design

Other: High intermediate ability in the Japanese Language, LaTex, Quartus, Xilinx, Multisim, Autodesk Autocad and Inventor

# **Projects**

**Object Oriented Programming:** Designed and implemented a game inspired by the classic arcade game Bubble Bobble in Java with a partner. Including character selection, animations, and multiple levels.

Data Structures and Algorithms: Worked with a team to create a maps program to find the shortest path between two points of interest. Implemented Dijkstra's algorithm and a graph.

Web Development: Designed and implemented a new website for scheduling, administrating, and viewing intramural sports games for my university

Embedded Systems: Created a program to parse university cafeteria's website for incoming meal menus and display in custom interface on Raspberry Pi

Databases: Designed and implemented a database and front-end access application using Transact-SQL and Java.

Computer Architecture: Worked with a team to design and implement a 16-bit processor and used our design to run the Euclidean Algorithm.

Design and Fabrication: Designed and fabricated a unique keyboard cover to aid a disabled student's typing.

#### Activities

Boy Scouts: Eagle Scout, Earned every available merit badge (139), Order of the Arrow member

Rose-Hulman Robomasters: team member and subteam leader (Global robotics competition team)