608-504-0332

#### **EDUCATION:**

• Bachelors Computer Sciences, expected May 2020

University of Wisconsin-Madison

Bachelors Computer Engineering, expected May 2020

University of Wisconsin-Madison

Major GPA: 3.6/4.00

# Related Coursework:

Computer Vision, Data Structures, Artificial Intelligence, Computer Graphics, Operating Systems, Algorithms, Signal processing, Computer Architecture and Processor, Digital System Design, Networks, Machine Learning.

### **EXPERIENCE:**

• Microsoft Corp., Redmond, WA

May - August 2019

SWE Intern in Business Intelligent team

- Designed and implemented a library for migrating report files in on-prem servers to cloud more conveniently.
- Worked closely with cross-platform RESTful and SOAP APIs for integrating the cloud application.
- Dedicated to open source and maintain the project on GitHub for customers to use.
- Created comprehensive unit tests with mock and local SQL servers to exhaustively test the tool.
- Work with the team in engineering practices including agile technique. Open-sourced GitHub Link: <a href="https://github.com/microsoft/RdlMigration">https://github.com/microsoft/RdlMigration</a>
- Siasun Robot & Automation Co., Ltd, Shenyang, China

June – August 2018

Computer Vision Team Intern

- Independently worked on a Multi-template matching prototype algorithm for industrial robotics (parallel manipulator).
- Derived core algorithms from open-source libraries and research papers.
- Matched over 1000 templates with angles and positions within 90 ms.
- Developed a system that supports the algorithm to make it a complete application and easier for later development.
- Wisconsin Robotics, Student Organization in Madison, WI

September 2016 – January 2018

Chassis Team Member

- Implemented inverse kinematics algorithms for the robotic arm.
- Maintained low-level microcontrollers modules such as operating chips in the rover.

### **PROJECTS:**

Handwritten Digits Recognition Tutorial

Dec 2019

Spring 2018

- An interactive machine learning tutorial for machine learning class activity.
- Written in python with scikit-learn.
- Snap Garbage Classifier

Madhack Hackathon, Fall 2019

- A cross-platform web app helps user to classify garbage.
- Worked as a back-ender for object recognition script, API use and Integration, server maintenance and database setup, written in NodeJS.

• Sleepnea Fall 2019

- An Android app that records and analysis snores to help users to evaluate their risks of Sleep Apnea and better connect with doctor.

• <u>HoloCraft</u> *Microsoft 2019 Hackathon, July 2019* 

A Neural Network + HoloLens 2 project that user can take pictures of an item, reconstruct it through a Neural Network into pixelized 3-D Object and project it into real world with HoloLens 2, written in python, Unity and C#.

• Picture Low-Polifier Fall 2018

- An app that uses image processing to transform pictures into triangular low-poly arts, written in MATLAB.

Simple MapReduce System

A system that takes a user-written function and run it in multi-thread, written in C.

## **SKILLS:**

- Computer Skills: Linux, gdb debugger, Visual Studio, WebGL, OpenCV, Machine Learning, Android Developing.
- Computer Languages: proficient in C, Java, MATLAB, C#, Python, C++. Basic understanding of NodeJS, html, JavaScript, XML, Assembly Language
- Other Skills: Unity, Microsoft HoloLens, Sql Server, Rapid Prototyping, 3D printing, Laser Cutting.