Yitong (Thomas) Shen

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SKILLS

Programming Languages	C/C++, Python 3, C#, JAVA, HTML, Processing, Matlab, Golang, R, OCaml
Operating System	Windows, Mac OS, Ubuntu, Cent OS, Raspberry Pi OS
Development Tools	Processing 3, MATLAB, IntelliJ, Android Studio, VMWare, Unity
Version Control Tools	GitHub, GitLab
Frameworks	React.js, Django, Flask, TensorFlow, OpenGL, CV2
Software Skills	Visual Studio Code, GDB, Marvel, Visual Studio 2019, Vim, CAD-Fusion

EDUCATION

University of Washington **09/2020 – Expected 03/2022**

Master of Science in Technology Innovation GPA: 3.82 / 4.00

University of Minnesota **09/2016 - 05/2020**

Bachelor of Science in Computer Science GPA: 3.62 / 4.00

PROFESSIONAL EXPERIENCE

Backend Developer, Internship **04/2021 – 08/2021**

MyInfluency Inc. Atlanta, GA, US

- Built a platform for local influencers to utilize their influence for small businesses.
- Collaborated with multiple cross-functional teams and delivered high-quality works.
- Troubleshot a complex problem affecting Django server that would not respond to Google Cloud Task.
- Inspected tasking queuing system and rewrote broken functionalities of Django server with Python3.
- Optimized the account login process to prevent users from duplicating logins.

PROJECT EXPERIENCE

Portable Weather Station, Industrial Sponsored Project **06/2021 – 12/2021**

- Designed a portable weather station with a data transporting system for data collection in a group.
- Developed a system to control hardware and collect data on a microcontroller with Arduino and C++.
- Constructed a LoRa Mesh-Network by RadioHead Library for data transporting.
- Built a simple server on the desktop to receive and visualize data by Arduino and Python Flask Framework.

Smart Air Purifier, Faculty Sponsored Project **Spring 2021**

- Designed a smart air purifier, built air quality and filter status checking system, worked with teammates.
- Constructed main controlling system and constructed data logging system on Raspberry Pi in Python.
- Built IoT system on Raspberry Pi with Python and Microsoft IoTHub.
- Established a database with Microsoft Azure and communication process between database and IoT device.

Object Detection Web Application, Course Project **Winter 2020**

- Developed an online real-time video-based translator within 6 weeks.
- Revised a user interface by adding interactive elements like video in HTML, CSS, and JavaScript.
- Programmed a Python Flask as a backend server, constructed data transmission progress.

Malware Detection Web Application, Industrial Sponsored Project **09/2019 – 05/2020**

- Designed, developed, tested, and deployed a server-based website checking system within a team.
- Established and optimized a webpage for presenting results in React.js with JavaScript and HTML.
- Built a RESTful API for frontend and backend communication in Golang.
- Created a honeyclient in Node.js and in thousand lines as the backend for analyzing potential malware.

ACHIEVEMENTS

2021 Microsoft Imagine Cup World Finalists **March 2021**

Team member of Zephyr Air, one of the 40 finalist groups Seattle, WA, US