JARVIS WANG

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> EDUCATION

McMaster University Sept. 2017 to Current B.Eng. Computer Engineering

> RELATED COURSES

- Circuits and Systems
- Data Structure and Algorithm
- Microprocessor Systems
- Logic Design
- · Principles of Programming

AWARDS

McMaster IMPACT Project · **Top 3 & Best Presentation** Dec. 2017

• Top 3 teams among 900 1st year engineering students

> VOLUNTEERING

Set-up & Information · First Robotics at McMaster Hamilton, ON

Apr. 2018 to Apr. 2018

• Set up, promoted social in the pits and stands, directed people from DBAC to the Hall, and provided information service to the passing visitors and participants

> SKILLS

Programming Languages: Python, C, JavaScript, Java, HTML, CSS, C++, MATLAB, Verilog, LaTeX, Swift, JSON, PHP, Assembly

Frameworks/Libraries: Node.js, Express, Angular.js, Bootstrap, Restful API, SQL, MongoDB, Git, Bash, OpenCV, AWS, Tensorflow, Android

Hardware / Tools: Arduino, Raspberry Pi, Oscilloscope, Soldering, Linux, STM32

Graphic Design: Photoshop, Illustrator, AutoCAD, Autodesk Inventor

Soft Skills:

Verbal and written communication, Teamwork, Planning, Team Leadership, Project Management

> EMPLOYMENT

Application Developer Intern McMaster University, Faculty of Health Sciences

May 2018 to Aug. 2018 Hamilton, ON

• Developed a web application to facilitate more efficient generation of clinical simulation scenarios used to train health care providers, decreased the generation time by 50%, built with Node.js, Express, Angular.js, Bootstrap, and MS SQL

· Migrated the application and existing simulation data to the internal data center

Mathematics & Physics Tutor MacBridge Academy

Jan. 2018 to May 2018 Hamilton, ON

• Worked on tutoring students from grade 4 to 12 in Math and Physics courses

Embedded Software Engineer Intern Wingtech Technology Co. Ltd.

July 2017 to Aug. 2018 Shanghai, China

- Researched, designed and integrated scalable applications of VR headset in C
- Implemented software requirement analysis and testing for RTOS on the headset

> PROJECTS

Banking Cat (DeltaHacks V)

Jan. 2019 to Current

- Developed a ChatBot to recommend the best banking solutions to the user by analyzing their uploaded banking statements.
- Built with DialogFlow NLP Platform and connected to the MongoDB Server on Google Cloud Platform, applied data analysis by Microsoft Azure API
- Deployed on Amazon Alexa, Google Home, and Assistant, and developed a web-frontend chatbot window.
- Project developed in HTML, CSS, jQuery, Bootstrap and Node.js

Iris(Gesture-Music Player)

Nov. 2018 to Nov. 2018

- Developed a gesture-controlled music player with RGB visualizer
- Used three IR sensors and one webcam (with OpenCV) as the gesture control module, integrated Spotify Web API and used signal processing (SciPy) to generate a spectrum from system audio input and encoded it to RGB Led array, built with Python and C(Arduino)

Music'o (Weather-based Web Music Player)

Feb. 2018 to Feb. 2018

- Submitted to Hack the Valley II
- Develop a web application called Music'o, which aimed at helping people relax their mind, mood and body by playing music according to the weather in the current city
- Built in HTML, CSS, and jQuery with Yahoo weather, geolocation and Spotify Web API and host it on AWS

EXTRACURRICULAR ACTIVITIES

PR Manager & Computer Vision Team Member

Sept. 2018 to Current

- MAC RoboMaster Team
- Represent McMaster University to participate in the DJI RoboMaster Robotics Competition
 Authored grant proposals to secure funding and prepared marketing materials to bring in new sponsors
- Work with computer vision team on neural network training, data scraping and computer vision for RC robots
- Implemented CV(distance measurement and object-tracking) modules on NVIDIA Jetson in Python and C++, and improved the aiming accuracy by 30%
- Work with control team on the interaction with CV module, using STM 32-based microcontroller and program using C

President Apr. 2018 to Current McMaster Sumobot Club

- Coordinate the **executive** team, **organize** club events and communicate with school departments
- Host tutorials and 2 sumo-robot competitions of over 300 participants