

Richard Guan

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EDUCATION

University of Michigan

Bachelor of Science in Engineering - Computer Science

GPA: 4.0/4.0

Ann Arbor, MI

Expected: April 2021

RELEVANT COURSEWORK

Applied Linear Algebra, Accelerated Introduction to Programming, Introduction to Combinatorics, Programming and Data Structures.

TECHNICAL SKILLS

Programming Languages: Python, Javascript, C++, MATLAB, HTML/CSS

Other Technologies: Django, React, Flask, Unix, Windows, Android

PROJECT EXPERIENCE

University of Michigan Solar Car Team — Ann Arbor, MI

- *Software/Strategy Team*

September 2018 - Present

- Developed functionality for multiple sessions of the Django-based web game WarGames to be played at once, and for multiple World Solar Challenge routes to be loaded, in order to better train team strategists for the World Solar Challenge. To implement these features, refactored the WarGames backend using Python and altered the WarGames UI using Javascript.
- Researched and implemented a new physics model in C++ for car's solar array in order to assist with crucial design decisions.

SnapCal Web App — Ann Arbor, MI

- *Project Creator*

September 2018 - Present

- Designed a web app using Django, Bootstrap with Javascript and Google Cloud Platform that streamlines the user experience of adding events from physical flyers to virtual calendars.
- Applied the Google Computer Vision API to extract and interpret text from photos and find events to add to Google Calendar.

MPowered Entrepreneurship — Ann Arbor, MI

- *Startup High School Project Member*

September 2018 - Present

- Selected for the Startup High School team to organize a pitch competition that aims to provide mentors and resources for over 100 high schoolers in the state of Michigan.
- Led efforts for obtaining sponsors to fund the pitch competition's prizes, space reservations, and food.

WORK EXPERIENCE

Sell Your Mac — Cincinnati, OH

- *Employee*

June 2018 – August 2018

- Responsible for performing quality assurance on all incoming items to ensure customers were paid within 48 hours of receiving an item.
- Repaired hinges, batteries, hard drives, and RAM in over 50 Apple devices for resale on eBay.

Cincinnati Children's Hospital Medical Center— Cincinnati, OH

- *Research Intern*

June 2017 – August 2017

- Created a support vector machine written in Python to diagnose stroke from MRIs.
- Preprocessed fMRI data in order to assist a PhD candidate's project diagnosing autism from fMRIs.

VOLUNTEERING EXPERIENCE

Fix N' Give — Cincinnati, OH

-*President*

May 2017 - August 2018

- Led a team of 14 people and organized a Computer and Accessories Drive event, collecting over 80 computers from the community in order to donate to local schools in need.
- Recruited and trained three new Fix N' Give members to expand the scope of services for local schools.