

MATHURAN SADAGOPAN

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Mathuran

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SKILLS

Programming

C, C++, C#, Python, Java; JavaScript, CSS, HTML;
Arduino, Verilog, Unity, Firebase, Git

3D Modeling

- Inventor, AutoCAD and Solidworks
- 3D Printing, Cura



EDUCATION

BSC of Computer Engineering (CO-OP) | McMaster University | SEPT 2017- APRIL 2021



EXPERIENCE

Web Dev Intern | Outsie the Box

| JULY 2018 – AUGUST 2018

- Made landing and signup page for an online marketing agency using WordPress, HTML and PHP
- Applied SEO and improved website load time to improve website traffic, and audience retention. (but company got acquired before website could be released and tested)
- Used sites like google Analytics and Hotjar to debug issues in website design by analyzing data and understanding heatmaps

Robotics Instructor | I CAN

| JULY 2017 – AUGUST 2017

- Taught kids from grade 1 to 7 robotics using the k'nex robotics kit. Developed strong communication skills and established a fun environment for kids to learn about programming and mechanics

President of the Woodlands Robotics Club

| SEPTEMBER 2016 - JUNE 2017

- Overlooked the Design, Electrical and Programming aspects of FRC and VEX robotics teams and meetings.
- Taught 50+ students, Inventor, C++, Java, and Electrical system through hands on application of lessons and various online tools. Monitored their progress via mini projects over the season.
- Organized events as well as finance for the club, raising over \$15 000 in funds



PROJECTS

Hack the North: Robo Order

<https://github.com/stevenc1013/RoboOrder> | **2018**

- Using the Google Home Mini, designed a table waiter speech assistant.
- Orders taken from the assistant would then be uploaded to a firebase database and shown on a website

Whack-A-Mole AR

<https://github.com/Vithop/Wack-A-Bok> | **2018-Present**

- Built an interactive game built on Unity using googles' AR core
- Players can throw weapons at Moles that pop out of the floor in AR

Google Cloud Sprint: Fire-lytics projects

| 2018

- Attempted to combine product data, google vision API and ML to correlate product design to product sales.

DELTA Hack IV: implemented muscle Gesture Control User interface

| 2018

- Using the myo armband's EMG sensors, 9 axis gyroscope and motion sensors, our team implemented a gesture interface to a 4x4x4 LED cube. Could further be implemented into gesture-controlled robotics.

Tesla Coil

| 2017

- Built a device that generated an electromagnetic resonance field.
- Can amplify a voltage to create large sparks of lightning as well as power light bulbs wirelessly