

**Github:** manas-joshi-uw

## EDUCATION

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### UNIVERSITY OF WATERLOO

Waterloo, ON

#### **Bachelor of Mathematics: Major in Applied Math(with Engineering Option in Communication and Control)**

- *Academics:* A in Algebra, Calculus 1, Mechanics, Electrical Engineering(Circuits).
- *Honors:* University of Waterloo's President's Scholarship, Faculty of Mathematics Entrance Scholarship.
- *Leadership:* A in Public Speaking.
- *Notable Courses:* Mechanics, Electrical Engineering(Circuits), Calculus 1 and 2, Computer Science 1 and 2.

## EXPERIENCE

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### PICKERING READING CIRCLES

Pickering, ON

*Senior Volunteer and Former Member of Board of Directors*

Apr 2013 – Mar 2016

- Helped start the *Math Circles* portion of the program.
- Designed and implemented a curriculum for kids in grades 6 through 8.
- Oversaw the education of around 29 kids, with the help of 10 others, during peak months.
- Recruited over 19 volunteers during a 2-year period.

### PINE RIDGE SECONDARY SCHOOL

Pickering, ON

*Co-Founder of Math Club and Physics Club*

Mar 2014 – Jun 2015

- Helped fellow students understand difficult concepts in Math and Physics.
- Helped 7 students prepare for Math and Physics contests taken place at the end of the school year.
- Tutored 7 kids during peak days of the week.

## PROJECTS

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### BRICK BREAKER

- Built my own version of Brick Breaker in JavaScript using the HTML canvas.
- Utilized arrays to build and randomize all the colors of the bricks.
- This project was my introduction to JavaScript and its various features.

### PERSONAL WEBSITE

- Created a personal website using HTML, CSS and Bootstrap. In previous versions, I have used animate.css.
- Included a Pong game I made in JavaScript using the HTML canvas.

### TRAFFIC LIGHT DETECTION

- Currently working with the Robotics Club to develop an algorithm that will recognize traffic lights and will tell our autonomous car when to start the race.
- This project gave me an introduction to MATLAB and image processing.
- Will eventually learn ROS to do other tasks.

### FITBOT- MESSENGER BOT

- Worked with a team in making a personal gym assistant through the Facebook Messenger Bot.
- Used Google Places API to implement a feature that would message the user to go to the gym if it detected he/she was not at the gym. Feature was not implemented in the end as current coordinates of user could not be found using the API.
- Implementing a "Workout" feature that allows a user to add workouts, modify workouts and be able to see all of their workouts. Each "Workout" was stored as an object.

## ADDITIONAL INFORMATION

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I have been accepted to a leading Entrepreneurship program(Velocity) at the University of Waterloo. As a result, I will get an opportunity to work with students on various projects and gain more experience in the coming months.

Familiar with and Currently Learning: C++, C, Racket, HTML, JavaScript, CSS, Node.js.

My 2A courses are: Logic and Computation, Linear Algebra 2, Calculus 3, Signals and Systems(ECE), Intro to Differential Equations.

