

# Anup Diwakar

anupd@umich.edu

(248)-550-6413

## Objective:

Highly motivated Computer Science student seeking internship opportunities to leverage my experience in math, programming and robotics.

## Education:

**University of Michigan - Ann Arbor, MI**

**Class of 2020**

**Bachelors of Science in Computer Science**

**Coursework:** Calculus 1-3, Elementary Programming 1

**Stoney Creek High School - Rochester Hills, MI**

**Class of 2016**

**Weighted GPA 3.94**

**AP Courses:** Calculus AB, Physics mechanics, Physics electrostatics and magnetism, Chemistry, and Microeconomics

## Leadership Activities and Interests:

- Member - National Honors Society
- FIRST Lego League Mentor award - 2014
- FIRST Robotics Competition World Champions, Team 469 Las Guerrillas – 2014
- Lead student mentor – Team 4810
- Cofounder – JGRV, a nonprofit organization providing education for the economically challenged children in India – 2008 - Present

## Skills:

- Proficient in Java, C++, Python, Microsoft Word, Excel, PowerPoint and SolidWorks
- Working knowledge of JavaScript, HTML/CSS
- Ability to work under tight time schedule and pressure
- Creative thinker
- Quick learner

## Projects:

**LawnBot 5000**

**Summer - 2015**

Designed and built a lawn mower robot to enhance my technology skills and have fun during the summer months

- Retro-fitted a commercial lawn mower by replacing a rigid steel frame and chassis to mount devices & sensors
- Employed best practices from my FIRST experiences – **Strategize | Design | Build | Test | Experience**
- Conducted extensive research and consulted FIRST mentors while coding Arduino to control the drive motors
- Embedded a safety button in the joy stick to stop the robot in case of emergency, along with a manual switch on the robot itself.
- Programmed the sensors to run the Lawnbot 5000 in autonomous mode and with users controlled mode via remote controller
- Followed a disciplined plan to track the cost and schedule using a customized MS Excel template

**T-Shirt Shooter Robot**

**Fall - 2014**

Lead a team of 20 students from the initial phase of brainstorming to the design and build phase of a T-Shirt Shooter robot. The revolving magazine system could hold 4 folded shirts at a time and move around with its maneuverable tank drive system. The Sprinkler solenoid shot a burst of air from the loaded compressor, shooting it at angles varying from 0 to 45 degrees at a range of 20 to 30 yards' maximum. The project goal was to design, build, and demonstrate within 6 weeks.