

# Mehul Ghosal

mehulghosal.github.io | github.com/mehulghosal

## Millburn High School, 2016-2020

- 4.1 GPA
- 35 ACT; 1450 PSAT; 780 SAT 2 Biology
- 5s on APCSP, APCSA, AP Biology, & AP Physics 1 & 2

## Experience

### Leadership

- hackMHS VI (2019), VII (2020) Sponsorship Director
- Sponsorship Directory for Millburn Robotics
- Project lead for *Lead Zeppelin*
- Co-President for MHS Astronomy Club

### Teaching

- Python/JS game development teacher for Cool Coding Club
- Volunteer JOAD archery coach for Wa-Xo-Be Archery Club
- Volunteer mentor for hackMHS V & VI, hosted "Intro to Python" workshop
- Tutor younger students to raise money for hackMHS

### Programming

- Proficient in Python for data analysis & computer vision
- Proficient in C++ development for robotics
- Proficient in Android app development with Dart & Flutter

## Projects

### *Deriving Horizontal Velocities of Equatorial Plasma Bubbles*

- Research project with Dr. Pradipta; analysis of data to find speeds of plasma artifacts

### *Lead Zeppelin*

- Mechanism to automate guitar playing; built from scratch, powered by Raspberry Pi

### Millburn Vex Robotics Team 2018-2020

- Codebase for autonomous and driver control written in C++

### *NexGenMath*

- Android app to improve math practice; HackNYU 2019 education track submission

### MHS Kiosk System

- Helped with woodworking, building physical structures + frontend with Raspberry Pi

## Accomplishments

- Won a national gold in my age division for olympic recurve archery in 2015.
- Placed 3rd in state for NJ Science League for earth science in 2017.