

# Joshua Markle

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## Objective

To obtain a research-based mentorship with a focus in computer science or artificial intelligence.

## Education

### Governor's School for Science and Technology

Graduation Year: 2024 – Unweighted GPA: 4.0

A highly selective magnet school that caters to high achieving students, helping them reach their full potential

#### Courses

- Computational Physics
- Calculus I & II
- Research Methodology & Ethics

#### Activities

- Represented the Governor's School for various programming competitions:
  - ACM High School Programming Contest (UVA) 04/2023
  - VCU Programming Competition 04/2023
  - Great Computer Challenge (ODU) - Scientific Programming Category 03/2023
- Python Programming Club – assists CS students and helps prepare students for programming competitions
- Physics Club – objective to learn more about physics and prepare for the National Physics Olympiad
- Game Jam Club – holds video game development contests focused on theme and time restrictions

### Warhill High School

Graduation Year: 2024 – Unweighted GPA: 4.0

#### Activities

- Varsity Soccer Team
- National Honor Society
- Key Club Member

## Skills

Python | C/C++ | JavaScript | HTML | CSS | Flutter | Firebase | HiveDB | AI/ML | Unity | Linux

## Projects

### Milestone – A Flutter Mobile App

08/21 - Present

Milestone is a comprehensive app designed to empower student drivers on their journey from learner's permit to driver's license. It helps users track their driving hours and provides them with key concepts needed to pass the exam.

#### Achievements:

- Winner of the 2023 Congressional App Challenge (Virginia's 1st District) - A nationwide competition between youth software developers to address problems in the community with app development.
- Official Honors Project for Warhill High School

### JoshuaMarkle.com - Website

03/23 - 04/2023

- A personal website that hosts my portfolio and helped me develop my web development skills

### Drone Stabilization AI – Unity ML Agents

01/2023

- Developed drone stabilization AI to stabilize a drone in flight in a simulated environment. The goal was to create the most optimal autonomous drone movement.

### YouTube Content Converter – Python Software

02/2023

- Software solution to efficiently handle mass download, storage, and playback of YouTube content

### Arithmetic Game – Unity Mobile App

01/2023 – 02/2023

- Published educational game for elementary students to make learning four-function math more engaging

## Activities

### Soccer

- Club Soccer (Reign FC) – ECNL Regional League – 2022 State Cup Champions
- Varsity Soccer at Warhill High School

### Video Game Development

- Developed dozens of video games using Unity & Python and participated in various Game Jams