



**PROGRAMMING
CLUB
2019-2020**

Content Area: Website Building

We teach you how to build a website

1. Hosting with webpack and/or express
2. CSS and related styles (such as SASS)
3. Frameworks such as react
4. The good-to-haves (lighthouse optimization)
5. General optimizations (compression, lazy-loading)
6. Website design
7. Buy or get a free domain, and hosting

Content Area: Servers

We teach how to manage the back end with node.js

Content Area: Artificial Intelligence

We teach you about artificial intelligence, deep learning, and machine learning

Types of AI: RNN, CNN, ANN, LSTM

AI libraries: Tensorflow

Models: PoseNet, MobileNet, CoCo SSD, etc.

Content Area: Languages

- a. Javascript

AP COMPUTER SCIENCE PRINCIPLES

- b. Java

PRINCIPLES OF JAVA GT

AP COMPUTER SCIENCE A

- c. Rust
- d. Kotlin
- e. Python
- f. Typescript

Planned Events (more to come)



1. Congressional App Challenge

- a. Build any app with any language
- b. Deadline is Nov. 1st
- c. Varsity and JV teams

2. MLH Local Hack Day

- a. One day long at University of Maryland College Park
- b. Sometime in December
- c. Provide own transportation/carpool
- d. Varsity and JV teams

3. Conrad Challenge

- a. Will update later
- b. Varsity

Meeting Schedule

1) Normal meetings

- a) You must attend at least 50% of meetings if you are in Junior Varsity
- b) You must try to attend at least 75% of meetings if you are in Varsity
- c) Every Tuesday from until 3:15 for normal club activity

2) Impromptu meeting (not-mandatory)

- a) Announced with little notice; for matters demanding immediate attention
- b) Very infrequent and are completely optional
- c) Pertaining to matters such as competition briefings

Teams

Note: Havish, Daniel, Jeffrey, and Max will not be on either team.

A

1. Up to 4 people maximum
2. Elite group participates in higher level competitions
3. Placement exams administered near the start
4. Skill analysis of multiple factors will determine eligibility
5. Stricter regulations of rules

B

1. Around 6 people
2. Participates in smaller competitions
3. Entry level in which less experienced members are placed into
4. Chill/have fun

Slack Communication

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Group Me

<https://tinyurl.com/mrhsprogramminggroupme>