“high school i/o”

An OHI/O Event | hack.osu.edu/hs
Saturday March 24, 2018 | PAST Foundation

Let’s build something amazing.

We’re so excited to have you be a part of high school i/o, OHI/O’s high school hackathon event. Attendees get to learn about computer science in a fun, engaging, and inclusive environment by working in teams to build real technology projects. You will have the opportunity to develop new friendships, build connections with professional mentors, and learn soft skills that will help you succeed in the real world. We look forward to seeing what you will create.

Venue

PAST Foundation
1003 Kinnear Rd
Columbus, OH 43212

We are grateful to be hosting this year’s High School I/O at the PAST Foundation.
We ask that you please respect the venue space. Below are some DOs and DON’Ts.

DO

- Enter through Door 1 on the east side of the building.
- Bring a laptop and anything else you might need to work on projects (chargers, hardware, etc).
- Clean up after yourself.
- Respect each other.
- Ask the mentors for help if you have any questions! They’re here to support your learning.
- Have fun!

DON’T

- Enter blocked off spaces, there will be signs. Spaces include but are not limited to:
    - Administrative Offices
    - Clean Fab Lab area
    - “Fish Bowl”

Wi-Fi

You can access the PAST Foundation Wi-Fi using the information below.
Wireless Connection: `PAST Public`
Password: `#PAST-Publicw1f1` (the "`i`"s in wifi are ones "`1`")

Check-In

When you arrive at the PAST Foundation please check-in at the table just inside the entrance through Door 1 on the east side of the building.

Schedule

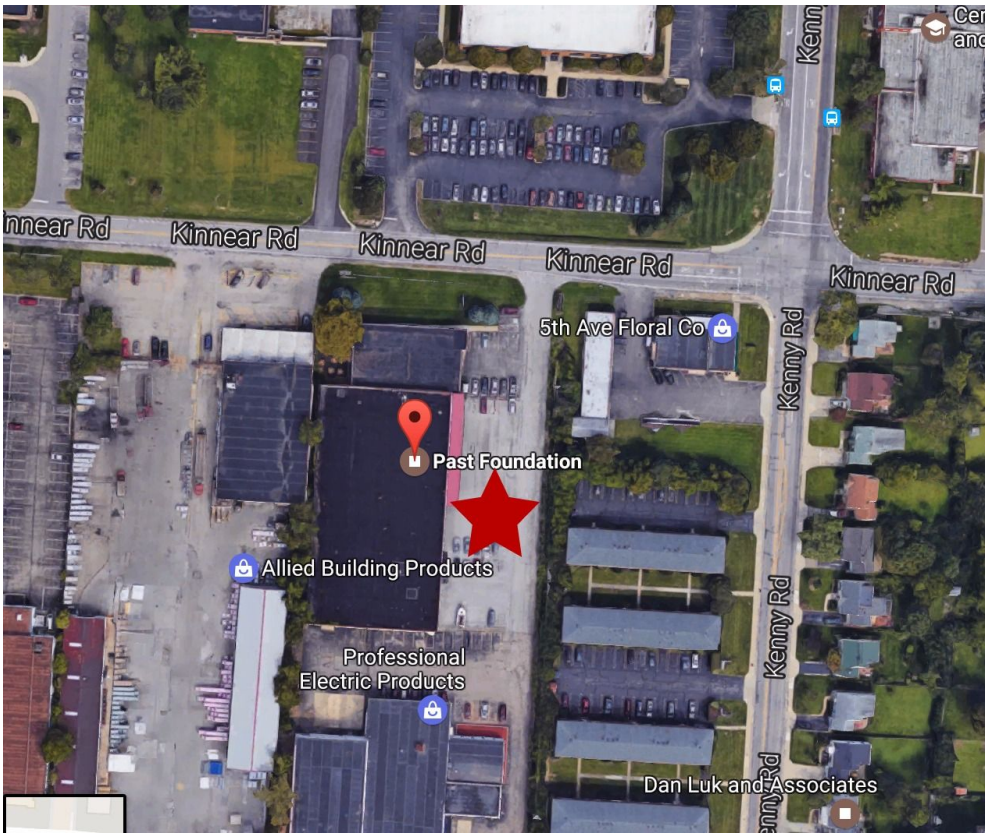
Below outlines the schedule for the entirety of the high school i/o event. The event is from **9am to 8pm** but the actual hacking will be taking place from **10am** until **5:30pm**. Please arrive by 9 am to check in and get set up before the opening activities.

Feel free to invite friends and family to the final science fair demo time and the final showcase!

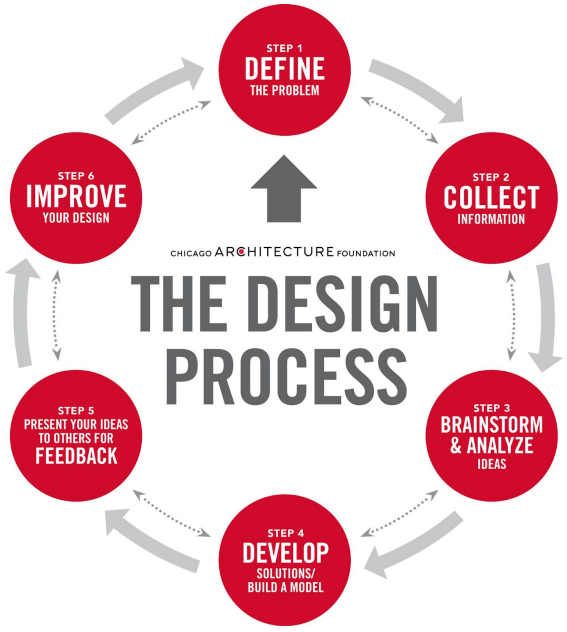
Time	Activity
9:00 a.m.	**Doors Open + Registration + Breakfast**
9:30 a.m.	**Opening Ceremony**
10:00 a.m.	**Hacking Officially Begins**
11:00 a.m.	**"Zero to Hero with React js" -** Kevin McCartney
12:00 p.m.	**"STEM Coding Physics Video Game"** - Chris Orban
12:00 p.m.	**Lunch**
1:00 p.m.	**"Machine Vision Workshop"** - Evan Stoddart
1:30 p.m.	**"Code for Good" -** Megan Knox
5:30 p.m.	**Dinner**
6:15 p.m.	**Science Fair + Judging Period**
7:30 p.m.	**Closing Ceremony**

Parking

There is parking directly adjacent on the east side of the PAST Foundation building (marked by a red star on the map below). We ask that you please do not park in the lot directly south of the building, as that lot is not owned by the PAST Foundation and violators may be ticketed or towed. Overflow parking is available across the street in the Metro Schools parking lot.



How to Hackathon



Hackathons are a lot of fun but they can be overwhelming at first. Luckily for you, a hackathon is great place to learn a new skill and put your existing skills of logic, creativity, and teamwork to work.

The basic idea of a hackathon is to create an application to solve a problem. The problems could range from creating an application for a security system to developing a web app to pair color palettes to creating a physics video game.

The first step is figuring out what problem you want to solve. Next you need to figure out how to solve it, gathering resources and choosing technologies to leverage as you work with your teammates to brainstorm creative solutions.

Now you can get to the fun part, building your project! This will probably take the most time, and you might run into roadblocks. Don't get discouraged, a great computer scientist knows when to ask questions and isn't afraid to collaborate. Finally, you can test and get feedback on your project, then start the process all over again and think of ways to improve.

Getting Started with Coding

If you are interested in building a mobile application or video game, we recommend you download the following before this Saturday:
iOS Application - Download XCode
General Coding Editor: Download atom
Android Application - Download Android Studio
Video Game Development - Download Unity

Get started with specific programming languages (search each site for different ones):

- Codecademy
- Khan Academy
- Udemy
- Julia Programming (this is an actual programming language that's pretty new and easy to learn!)

Getting Started with Code -- Mini Tutorials
https://www.touchdevelop.com/hourofcode2

MIT's App Innovator -- Mobile App Development
http://appinventor.mit.edu/explore/hour-of-code.html

Google's Web Application Guide
https://developers.google.com/web/

Check out additional resources at hack.osu.edu/resources

Project Inspiration

- Physics video game project: go.osu.edu/hourofcode2
    - If you are interested in doing this project, there will be a workshop to learn more about the logistics of physics in video games.
- To learn more about STEMCoding and other potential projects, check out their youtube channel here
- Don't know where to start? Here's a website that generates endless ideas for potential projects!
- This website also has ideas for projects

Thank You!

We are so thankful to have you at high school i/o. By devoting your time and energy, you are learning crucial skills for your future in computer science and turning your ideas into reality. If you have any questions, concerns, or suggestions, feel free to reach out to the OHI/O team at hackathon@osu.edu.