OHI/O INFORMAL LEARNING IN TECH

By emphasizing informal and diverse learning opportunities for students regardless of experience or background, the OHI/O Program fosters a tech culture at The Ohio State University. Outside of the traditional classroom, OHI/O connects students to real-world problems and opportunities by engaging with the community and industry partners.

OHI/O organizers are driven by a fundamental belief in the power of creation and are dedicated to helping students develop skills such as technical ability, communication, creativity and critical thinking. The program is building excitement, camaraderie, and access to resources for the thinkers, makers, and do-ers of Ohio State.

HISTORY

Since its first year in 2013, OHI/O's annual hackathon has grown from 100 students in the library basement to 750+ students in the Ohio Union Ballroom in 2018. In addition to the flagship hackathon, the OHI/O platform introduced satellite events in 2014, namely Ohio State's first hardware-focused Makeathon. In 2015, the program sponsored Ohio State students to attend GiveBackHack, a Columbus hackathon focused on social entrepreneurship.

EVENTS

Since 2013, additional creative and competitive events have emerged from OHI/O, forming the largest and most visible aspect of the program.

HackOHI/O

Ohio's largest hackathon, a signature event at Ohio State, brings together over 750 students, 100 volunteers and 200 gallons of coffee. Students work in teams over 24 hours to create projects of their own choice, or by tackling a problem from an industry sponsor. Teams demo for a panel of judges and have the opportunity to win prizes, internships or additional development support. Participants represent 55 different majors. The event also boasts a high percentage of women participants, up to 1 in 5 this past year.

MakeOHI/O

The first hackathon spin-off event focuses on a wide array of hardware projects, from robotics and automation, to circuits and electromechanics.

High School I/O

The first outreach spin-off event to take the hackathon model into the community and invite students from grades 9-12 to spend a Saturday building in teams, while learning from Ohio State students and industry volunteers.
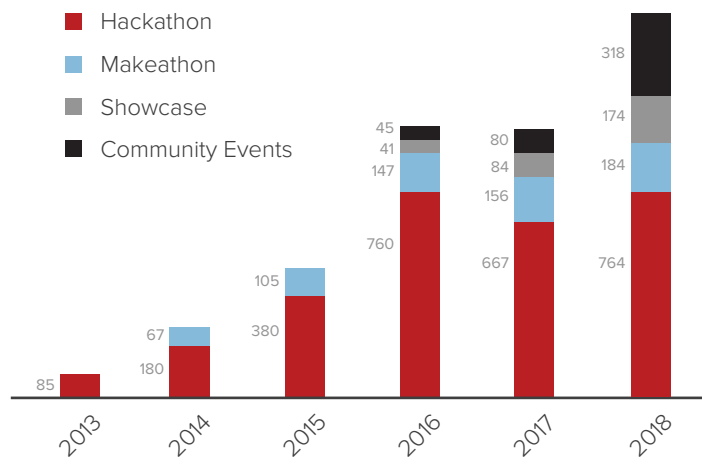
Robo I/O

A new two-day event for middle school students to learn about both hardware and software by designing and building a responsive animal robot. Current Ohio State engineering majors and education majors come together to plan the lessons and mentor the middle school teams in their design/build/show weekend.

ShowOHI/O

The best of the best from our hackathons and makeathons are invited to show off and talk about their work in this party-like atmosphere in downtown Columbus.

SIGNATURE EVENT GROWTH

Legend:
- Hackathon
- Makeathon
- Showcase
- Community Events

Year	Hackathon	Makeathon	Showcase	Community Events
2013	85			
2014	180	67		
2015	380	105		
2016	760	147	41	45
2017	667	156	84	80
2018	764	184	174	318

THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

WORKSHOPS AND EXPERIENTIAL LEARNING

Faculty and industry representatives present on cutting edge tech topics, offer activities to build workforce skills and host discussions on current methodologies for an audience of eager students from various disciplines. The information and learning goals may be entry level or advanced, multidisciplinary or with a narrow focus.

COMMUNITY INVOLVEMENT

OHI/O's mission of building a tech culture goes beyond campus to support local schools, non-profits, community hackathons and family events. This support is often found in the form of OHI/O students hosting an educational activity at a table, sending students to local conferences, interacting with Smart Cities or volunteering to mentor others in the community. OHI/O annually helps produce the local *Maker Hour of Code* event for families and was a founding member of Columbus Urban League's *Tech with a Twist* weekend for students in grades 8-12.

Ohio State alumni engage with students at events as technical mentors and as judges. They also return to campus to host tech workshops and provide insights into their industries.

EDUCATIONAL RESEARCH

OHI/O partners with Ohio State faculty and local tech educators to apply for local and national research grants. OHI/O is the recipient of the 2018-2021 Advances in STEM Learning grant from the NSF to investigate benefits of collaboration of interdisciplinary faculty for informal learning. *go.osu.edu/ohioaisl*

SEEDLING GRANTS

As students create various minimally viable products over the course of a weekend, some have great potential to undergo further development. Students may apply for grant funding and other resources to achieve the next milestone with their product development.

SCHOLARSHIPS

OHI/O recognizes the importance of doing, tinkering, teamwork and experience in the learning process. While many scholarships already exist for grade and tests scores, OHI/O offers scholarship funds to students who prove their expertise and future promise through making and creating.

COMMUNITY AND PARTNER EVENTS

Data I/O

In partnership with Big Data Analytics Association and the Data Analytics Major, a full day of digging into unique datasets for teams to compete in one of three areas: Data Visualization, AI and Predictive Algorithms, and Actionable Insights.

Logi OHI/O

In partnership with the Math to Industry Club and the Mathematics Department, a two-day case competition in logistical and quantitative data to help identify profitable business solutions.

Hack AI

In partnership with the Artificial Intelligence Club, a smaller hackathon specifically devoted to all things AI: neural nets, machine learning, computer vision and more.

Brain Health Hack

In partnership with the Stanley D. and Joan H. Ross Center for Brain Health and Performance, the Neuroscience Research Institute and the Chronic Brain Injury Discovery Theme, this is a weekend of creating real projects to help address various brain health and performance research and clinical needs. Students design, build and demonstrate projects to a live audience of students, faculty and representatives from both health care and tech industries.

Bio-Hack

A new event in partnership with the Biomedical Engineering Society at Ohio State and May We Help, students create software and hardware solutions to patient situations. Unique to this event is a longer lead-up time in team formation, problem definition, solution forming and project planning to make use of a limited competitive build timeframe on campus.

Code i/o

A half-day middle school intro to scratch programming and web design in partnership with ACM-W. This popular event is geared towards girls and fills up quickly every year.

CONTACT

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