

# HackOHI/O 2018 Report

The **sixth annual HackOHI/O**, Ohio's largest hackathon, took place from Saturday, October 27th to Sunday, October 28th, 2018 in the Grand Ballroom at the Ohio Union, drawing **764 hackers** from **17 schools** across the country. For 24 hours, these students worked in teams to create prototypes to solve real-world problems with technology. At the end of the weekend, these students' projects were judged for a chance to present at the final showcase as one of eight winning teams.



Pictured: the Grand Ballroom during HackOHI/O, hosting hundreds of hackers

# By the Numbers

**764** hackers (Ohio's largest hackathon)

// **82** projects submitted for judging

// **53** majors

**17** schools

**18.7%** women

**21** industry sponsors

// **100+** mentors

**100+** industry reps

**50+** judges

// **48** projects submitted for sponsors' challenges

**67** alumni returning as mentors, judges, and industry representatives

**6** sponsor challenges

// **Microsoft**

**JP Morgan Chase**

**Honda**

// **Engie**

**AEP**

**AgTech**

**8** hype events: Microsoft, Engie, CapitalOne, Battelle, Tableau, Brooksource, Intro to R Programming, Science Cafe

**\$15k+** in prizes

**1** countdown clock set for 24 hours



# Motivation

## What is a hackathon?

A hackathon is a 24-hour event where students work in teams of 2-4 to build technology solutions to real-world problems. This can take the form of mobile apps, websites, robots, and more. For example, our winning team of 2 students this year asked themselves, “My friend who lives on South Campus always has to walk home alone. How can we make sure she’s safe?” and as an answer, built a mobile app that will track a user’s walk home and alert their friends accordingly if they don’t confirm within a set amount of time that they arrived safely.

Hackathons are an excellent place for students to connect with their peers, learn new technology skills, network with industry representatives, and have fun. This year’s HackOHI/O brought together 764 students from 17 schools all over the Midwest and 50+ majors, including Computer Science, Mechanical Engineering, Finance, Sociology, Aviation, Linguistics, Political Science, Biochemistry, Geography, Nursing, and more. Additionally, the hackathon brought in 21 industry sponsors and 150+ representatives from those sponsors to mentor students. **HackOHI/O is an unparalleled opportunity for students to grow outside of the classroom.**

## Why do we do this?

HackOHI/O is put on by the OHI/O program at Ohio State. OHI/O’s mission is to foster a tech culture at Ohio State and its surrounding communities, to provide students the opportunity to learn and build outside of the classroom. Through events like HackOHI/O, OHI/O connects students to real world problems and opportunities by engaging with the community and industry partners.

As a program, OHI/O fundamentally believes that hackathons are an excellent place for students to grow their technical skills and careers outside of the classroom. In addition to hosting HackOHI/O each year, OHI/O offers a range of other hackathons including MakeOHI/O (a hardware focused hackathon), High School I/O (a hackathon for high schoolers), Data I/O (a data focused hackathon), Quant I/O (a quantitative hackathon), and Logi I/O. By creating an ecosystem of technical events and culture on campus, OHI/O provides students with the opportunity to explore their creativity, expand their skills, and tackle projects outside of the classroom. Often, this can be the steppingstone to the beginning of a student’s career as well. Industry sponsors connect our students with internships and full-time jobs, and student projects at hackathons can launch into a full-time side project as well.

OHI/O aims to be a library of resources to students in Columbus. Through our flagship event, HackOHI/O, we give students the opportunity and the resources to step outside of the classroom and explore technology in a hands-on, engaging environment.



# Hacker Experience

93%+

Interacted with a sponsor (+10% from 2017)

91%

Plan to attend HackOHI/O 2019

50+

Majors represented outside of CS

350+

Miles travelled by busses bringing hackers

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Technical talks throughout weekend

150+

Gallons of coffee consumed

## In their words, asking hackers what they learned...

“We learned **JavaScript, PHP, and a little SQL**. Few of us had ever done web design before”

“I learned a lot about using **Flask to deploy Python** code!”

“I got more experience in **C coding** [and] and I learned a bit about **Swift**”

“We learned how to create an **Android app!**”

“I learned a ton about **Bluetooth** technology”

“I became much more familiar with **Unity and C#**”

“I learned about **Python, Microsoft Azure, Git**, package managers, and the command line...”

# Winning Teams

## Best Software Hack: “Smart Return”

- A mobile app with the goal of making it safer for people walking home alone by notifying their friends when they leave and when they arrive home (or don't arrive).
- Team members: Jared Mitten, Angela Rucci
- Prize: Microsoft Surface Laptops

## Best Hardware Hack: “E”

- A solar-powered autonomous robot that collects pollution data of various metrics and then sends this data to a server, creating the ability for real-time data analysis to improve our rapidly deteriorating water quality levels through awareness and prevention.
- Team members: Jayanth Gunda, Raghav Samavedam
- Prize: Nintendo Switches

## Most Impactful Hack: “AuxNet”

- A mobile app using a mesh-network to facilitate widespread communication in disaster scenarios, even when no internet connection is available.
- Team members: Joe Forsman, Zach Allegretti, Sahil Khatri, Jack Plank
- Prize: Ultimate Ear Blast Speakers

## Best Designed Hack: “The 4<sup>1/2</sup>”

- A 3D map of Ohio State’s campus to help new students learn to navigate campus. The user moves around as a Buckeye to specific places on campus as indicated by a prompt.
- Team members: Timothy Huang, Robert Wetzler, Suraj Suresh
- Prize: BeatsX Wireless In-Ear Headphones

## Most Original Hack: “M-Squad”

- A hack allowing the user to open a door without having their actual key, using a WiFi connection to spin a motor on the door from any iOS device.
- Team members: Isaac Zachmann, Collin Aldrich, Peter Campanelli
- Prize: Daydream VR Headsets

## Most Ambitious Hack: “HYCLZ”

- A hack extending open source code sharing by allowing users to “like” portions of a program, see the number of likes as a heat map on the program, and publish interaction to other social media sites.
- Team members: Chenzhang Hu, Wally Yang, Xinyu Liu, Yuyi Chang
- Prize: Hexgears X-1 Mechanical Keyboards

## Best New to Hack: “It’s Not a Bug It’s a Feature”

- A hack leveraging Azure to screen photographs for nudity, alcohol, and drugs, report to the user, and allow the user to post the filtered photos to their social media. This aims to protect the reputation and employability of users who may mistakenly post photos to social media.
- Team members: Jeffery Morhous, Bofan Wu, Nathan Smith, Jonathan Soldan
- Prize: Fujifilm Instant Cameras + Film

## Best Clutch: “VR Interview Simulation”

- A VR hack to allow users to practice interviewing and public speaking skills in an immersive one-on-one environment and self-assess your performance to improve interview skills.
- Team members: Lauren Saggar, Michael Morrill, Pascal Phoa
- Prize: Tile Mates

In addition to our top 8 teams, we'd like to recognize 33 finalists from 10 teams, whose projects were similarly impressive and commendable.

Arjun Aeri	Nathan Balli	Mulan Blum	Max Clausius
Jason Clemens	Sam Coyle	Alex Doan	James Finefrock
Billy Fong	Danny Freyschlag	Andrew Fu	Siddhant Gangwani
Mitchell Giese	Benjamin Higgins	Jacob Hoylman	Andrew Jivoin
Michael Kaltman	Emily Kong	Kohl Kuntze	Ian Mahoney
Hunter Mastin	Kyle McIntyre	Cory Miller	Josh Miller
Isaac Ng	Rahul Pokharna	Sibi Sengottuvel	Alexander Shearer
Alexander Telich	Alex Truman	Ryan Williamson	Bobby Yost
Jon Zimmerman			

# Our Industry Partners



**Microsoft**

**HONDA**  
The Power of Dreams

JPMORGAN CHASE & Co.



 **irthSolutions**

**engie** **ROOT**

**BATTELLE**

**BIGLOTS!**  
FOUNDATION

 **Capital One**

**DSW**  
DESIGNER SHOE WAREHOUSE®

**FedEx**®

**KeyBank** 

KROGER TECHNOLOGY

**Rockwell**  
**Automation**

**Veeva**

• A P T I V •

covermymeds®

 **jamf**

 **Nationwide**®

 **STATE AUTO**  
Insurance Companies



 THE HONOR SOCIETY OF  
**PHI KAPPA PHI**

 **rev1 ventures**

 **sticker mule**

# Industry + HackOHI/O

In the weeks leading up to HackOHI/O, sponsors held technical talks, workshops, and info sessions to prep students for the hackathon and introduce new technologies. At HackOHI/O, sponsors spoke at our opening ceremony, recruited and interviewed students throughout the weekend, hosted technical talks throughout, offered challenges and project ideas to students, and gave out prizes in our closing ceremony.

Without our sponsors, HackOHI/O would not have been to achieve the level of growth that we have in the last few years. Our sponsors' dedication, time in, and passion for what we do has grown the hackathon immeasurably.

## Technical Talks at HackOHI/O



JPMORGAN CHASE & CO.

## Sponsors' Challenges

**Microsoft** - Best AI Hack with Azure Cognitive Services

**Honda** - Make Commutes Safer, More Efficient, and Greener

**JP Morgan Chase & Co** - Best Hack for Disaster Relief and Recovery

**AEP** - Leverage Social Media to Celebrate Customer Loyalty/Anniversaries

**Engie** - Energy Conservation App

**AgTech** - Smart Watering Drip System



# HackOHI/O in the Media

Follow us: [Twitter](#) | [Facebook](#) | [Instagram](#) | [Flickr](#) | [Youtube](#)

Check out [HackOHI/O 2018 photos](#) on Flickr.

## News

Featured in the Lantern:

<https://www.thelantern.com/2018/11/love-of-learning-propels-student-to-success-at-hackathon/>

## Tweets

Tags: #hackohio #hackohio2018



Séan @JPGR Doran @spjgprd · Oct 28

And that's a wrap! Until next year 🎉 #hackohio #hackohio2018 – at The Ohio Union

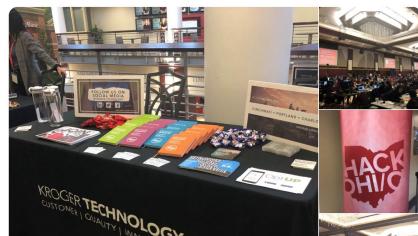


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Kroger Technology  
@kroger\_tech

Follow

We were at @OhioState's HACK OHI/O this weekend, where over 750 undergraduate and graduate students came together to design, build, and demonstrate projects to a live audience of students, faculty, and tech company representatives. #hackathon #techjobs #hacking #hackohio



Arnab Nandi @arnabdotor · Oct 28

Interviews in VR! #hackohio2018 #hackohio



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# The HackOHI/O Team

HackOHI/O is put on by [OHI/O](#), Ohio State's hackathon program. HackOHI/O is possible in large part because of its team of student organizers and program director.

## Student Organizers + Program Director

Pictured below, top row moving downwards: Aria Marean, Nic Siebenaller, Alvin Law, Ivan Porollo, Riya Lengade, George Li, Emily Engle, Andrew Vetovitz, Sarah Ryherd, Courtney Campbell, Nyna Sayarath, Mary Catherine Good, Anusriti Das, Stacy Kauntz, Kelly Wu, Sruti Chigurupati, Caitlyn Horn, Jacob LeBlanc, and Julia Armstrong.



## OHI/O + The Ohio State University: an additional thank you to...

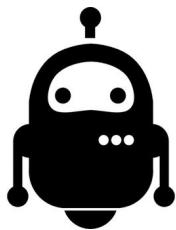
The College of Engineering, Engineering Career Services, OCIO, University Libraries, Office of Student Life, Department of Computer Science & Engineering, TechHub, Center for Design and Manufacturing Excellence, and Department of Electrical & Computer Engineering

## OHI/O Program Director: Julia Armstrong



# Upcoming OHI/O Events

What's next? OHI/O hosts hackathons and other events year-round, including 4 upcoming events this spring.



## Robo I/O - January 19-20, 2019

Robo i/o is a two day workshop for junior high schoolers aiming to provide students an opportunity to learn about computer science in a fun, engaging, and inclusive environment. Students will work in teams to build projects with TI-Nspire calculators and innovator hubs.



## MakeOHI/O - February 2-3, 2019

MakeOHI/O is a 24-hour hardware hackathon focusing on students working in teams to build hardware projects.



## ShowOHI/O - Spring 2019

ShowOHI/O is a science-fair-style tech showcase for students to demo their personal projects and connect with peers, industry professionals, and the greater tech community.



## High School I/O - Spring 2019

high school i/o is a one day hackathon for high schoolers focusing on introducing students to computer science and hackathons in an engaging and inclusive environment.

# Glimpses into HackOHI/O



