

Welcome to HackCooper! We're super excited to have you with us this weekend at Cooper Union's third annual student hackathon. Over the next 24 hours, you can:

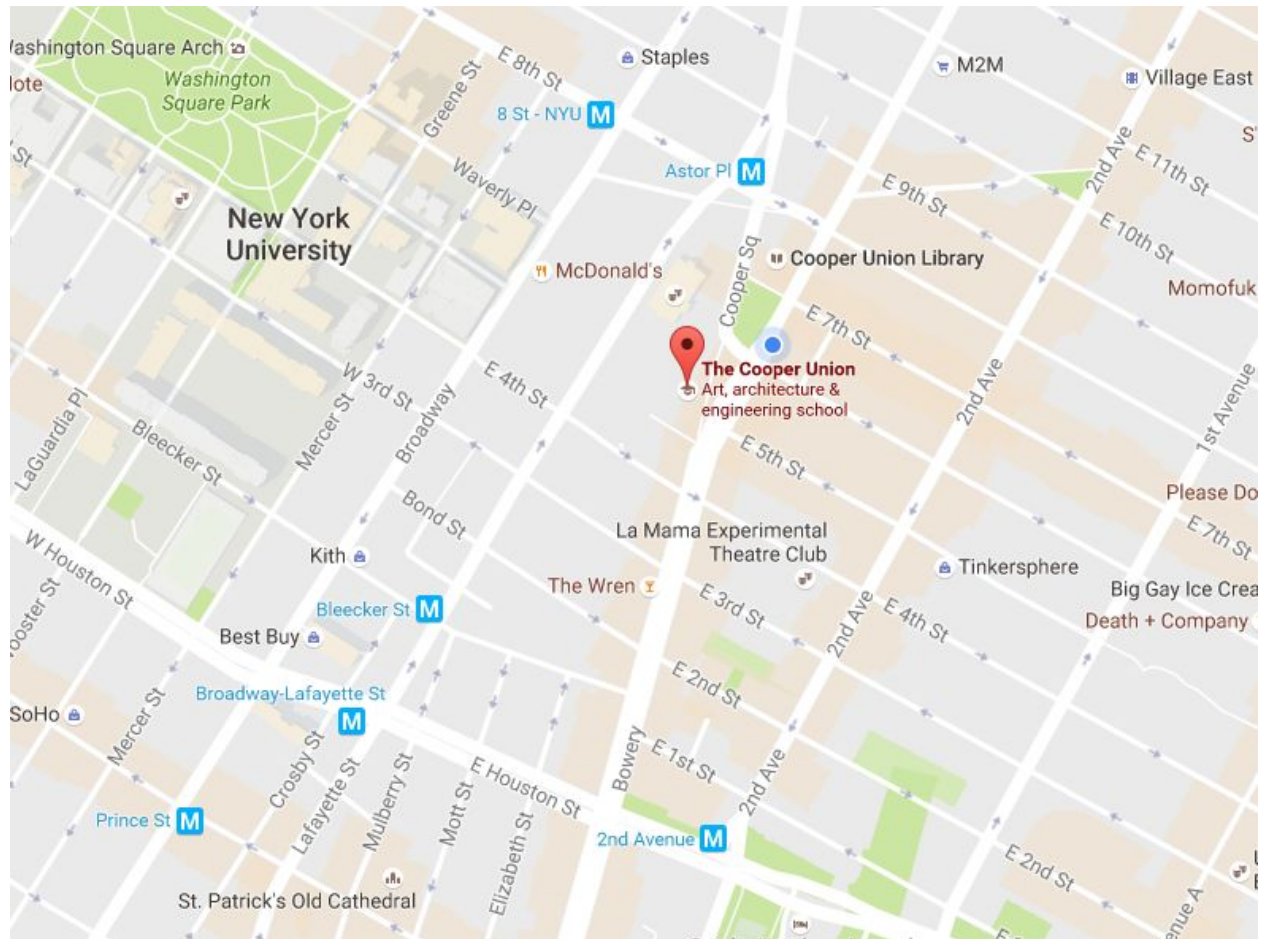
- work on cool projects
- meet new people
- listen to amazing tech talks
- Talk to mentors
- eat lots of free food
- collect awesome swag
- demo your hacks
- win all the prizes

Be sure to join our [HackCooper](#) event page to keep yourself updated and sign up for HackCooper on devpost to submit your hacks! If you have any questions, HackCooper organizers will be wearing **black HackCooper T-shirts**, and will be happy to help you out. Have fun and good luck hacking!

In this Info Packet you will find:

- How to Get Here
- Schedule of Hackathon
- Rules
- Judging Criteria and Logistics
- Prizes
- Mentor Tables
- Available Spaces and materials

## How to Get Here



Location : 41 Cooper Square, New York, NY 1003

Nearest Stations:

Astor Place on 6 Train

8th Street NYU on N,Q,R Train

2nd Ave on B,D,F,M Train

### **Coming from Metro North:**

Get off at Grand Central Station, then transfer to downtown 6 Train to Astor Place

### **Coming from LIRR:**

Get off from Penn Station, then transfer to downtown N,Q,R train to 8th street NYU

## **Hack Cooper 2016 Schedule**

### **9/24 SAT**

- 3:00 pm Check In opens in 41 Cooper Square Lobby + Meet and Greet
- 4:00 pm Kickoff in Rose Auditorium
- 4:30 pm Facebook Keynote Talk
- 5:00 pm Start Hacking!
- 5:00 pm Cooper Union Club Talks -- Introduction to Hackathon Series
- 5:30 pm Yext Tech Talk
- 6:15 pm Facebook Tech Talk
- 7:00 pm Rent the Runway Tech Talk
- 8:00 pm Dinner in Frankies
- 8:00 pm Cooper Union Young Alumni Social in Gallery
- 8:30 pm Viacom Tech Talk
- 9:15 pm Autodesk Tech Talk
- 10:00 pm LinkedIn Tech Talk

### **9/25 SUN**

- 12:00 am Midnight Snack in Frankie's
- 8:00 am Breakfast in Frankie's
- 12:00 pm Lunch in Frankie's
- 2:30 pm Project Submission Deadline // Stop Hacking!
- 3:00 pm First Round Judging Begins
- 4:00 pm Demos // Final Round Judging
- 4:45 pm Finalists Announced // Awards

## Rules

1. Pre-registration is required. No drop-ins.
2. You must present valid photo ID upon arrival.
3. No food in Rose Auditorium (the Auditorium on lower level 1, LL1).
4. No sleeping bags or other sleep apparatus.
5. Always follow instructions from Cooper Union guards as well as HackCooper staff.
6. You may not remove power tools from labs.
7. No alcohol is served or allowed at the event.
8. Recreational drugs may not be brought into our buildings or consumed therein.
9. Be respectful and behave professionally. Harassment and racist, sexist, or exclusionary jokes or comments are not appropriate for this event.
10. HackCooper participants must follow both HackCooper's code of conduct (listed below) and MLH's code of conduct

## Judging Criteria and Logistics

All hacks must be submitted through our **devpost** site, which will be posted on the day of hackathon in Facebook, so stay tuned! It takes a while to finish posting everything on devpost, so be sure to leave some time for that.

All hacks would judged base on 2 criteria -- **Creativity and Technical Efficiency**. All hacks must be submitted to our devpost before 2:30 pm on 9/25. Afterwards, teams would be contacted through email for preliminary judging.

During preliminary judging, each team would need to present to 3 judges separately. Each team would have 2.5 minutes to present their hacks to the judges and 2.5 minutes of Q&A. Judging would occur in Frankies in a round robin style.

The finalists would be announced at 4 p.m. in the ROSE auditorium .At that time each team would have 5 minutes to present to our final judges.

For a list of prizes, see our prizes page below.

## **Prizes**

### **Best Overall Hack**

The winner would be granted an all-expenses-paid trip to the FB HQ to participate in Facebook's hackathon finals.

### **Most Technical Hack**

We are looking for hacks that shows an in-depth understanding of the hardware/software used. The winner of this prize gets a \$500 prize.

### **Most Creative Hack**

Let your imagination run wild! We are looking for ideas that are inspiring and have the wow factor with it. The winner of this prize gets a \$500 prize.

### **Best Use of AWS**

Winners would get a 1 TB hard drive.

### **Best Domain Name from Domain.com**

Winners would get Domain.com Swag Bags

### **Best Data Privacy Hack**

Develop a project that helps users better understand their digital footprint or control their personal data. Winners get Watch Dogs 2 Collector's Edition for each member of the team.

### **#HackHarassment**

Use your tech skills for good and hack online harassment! Build a software solution that can help reduce the frequency and/or severity of online harassment.

### **Best Use of 3D in a web app**

A \$100 gift card for each team member from Autodesk will be awarded to the team that have the best use of 3D modelling in a web application

### **Best Use of Video Hack**

Eligible submissions for Best Video Hack must be focused on video content, whether this is a creative implementation of video, a video processing app of some sort, or something else. We'll be looking for projects that use video in the most interesting and technically impressive ways. The winning team will receive VIP tickets to the Daily Show with Trevor Noah – one for each member!

## **Talks**

### **Delivering a Hackathon / Elevator Pitch**

By Jiwoon Park and Akshay Navada from The Cooper Union Toastmasters

Time: 9/24 5:00 p.m. - 5:10 p.m.

Location : 104

### **Introduction to Hacking with Arduino**

By Abdullah Siddiki from The Cooper Union Microcontroller Club

Time: 9/24 5:10 p.m. - 5:30 p.m.

Location : 105

### **Creating a Basic Web Service with Google Go**

By Harrison Zhao from Yext

Time : 9/24 5:30 p.m. - 6:15 p.m.

Location : Room 104

### **Instagram**

By Lukas Camra from Facebook

Time : 9/24 6:15 p.m. - 7:00 p.m.

Location : Room 105

### **Talk by Rent the Runway**

By Zain Cheng from Rent the Runway

Time : 9/24 7:00 p.m. - 7:45 p.m.

Location : Room 104

### **Common Integration at Scale with Mobile + An Exploration of React Native for MTV News**

By Viacom

Time : 9/24 8:30 pm - 9:15 pm

Location : Room 104

### **Autodesk 3D Web API**

By Jaime Rosales from Autodesk

Time : 9/24 9:15 p.m. - 10:00 p.m.

Location : Room 105

### **A Tale of Two Systems**

By David Max from LinkedIn

Time : 9/24 10:00 p.m. - 10:45 p.m.

Location : Room 104

## **Mentor Tables**

A hacker is going to encounter challenges at different stages of the hackathon -- all the way from idea formation to prototype development. Hence, we have invited people from industry to help you out throughout the way. You could bounce ideas off them, or if you get really stuck, mentors are a great resource to help you solve problems! All Mentor Tables are going to be in **Room 501** and mentors would come and go in 2 sessions.

### **9/24 5 p.m. - 12 a.m.**

**Bloomberg** : 5 pm - 12 am

Specialty : Javascript, C, C++, SQL/databases

**Facebook** : 9 pm - 12 am

Specialty : AI Research, Instagram, Android, Local, Front End/Server

**Rent the Runway** : 9 pm - 10 pm

Specialty : Software Engineer, Front End Platform

**LinkedIn** : 9 pm - 10 pm ; 11 pm - 12 am

Specialty : Software Engineer

**Hudson River Trading** : 6 pm - 8 pm

**Flatiron Health** : 5 pm - 7 pm

Specialty : Python , SQL, Flask, Angular, Backend with data / data pipeline

### **9/25 9 a.m. - 2 p.m.**

**Bloomberg** : 9 a.m. - 2:00 p.m.

Specialty : Javascript, C, C++, SQL/databases

**Facebook** : 9 a.m. - 11 a.m.

Specialty, Media, Local, Front End/Server

Each group would have 20 minutes to talk to your mentor. We will get back to you in at most an hour for the appointment. Each team would be able to schedule up to 2 appointments. To sign up for mentors -- please send an email to [so@cooper.edu](mailto:so@cooper.edu) and I'll fill your names onto the mentor timetables.

## **Available Spaces and Materials**

You can utilize all public spaces to hack! If you want to go to a classroom, here is a list of rooms available.

1st Floor : Room 101, 106, 107

4th Floor : Room 427

5th Floor : Room 502, 503, 504, 505, 506

8th Floor : Room 801

### **Lab Space**

Our 3rd Floor Physics Lab (301), 6th Floor ICE Lab (603) and Junior Lab (604) are open for hackers. You can use our lab spaces, but please respect our space and clean up after using the lab space.

### **Hardware Palette**

Oculus Rift CV1 and Alienware Desktop Computers	Arduino Hacker Shield Real Time Audio Processing Kit
Leap Motion	Samsung Phone
Intel Edison	Samsung Gear VR
Pebble	Flex Sensors
Base Shield	Bluetooth Module HC-06 (Arduino and Raspberry Pi compatible)
Alienware 13 laptops	Amazon Echo
Sparkcores	Ultrasonic Range Sensor (Arduino and Raspberry Pi compatible)
Pebble Time	IR Remote Control 38 kHz
Dell Monitor	RC522 RFID / NFC Kit with Breakout board
Muse Headband	IR Receiver Module 38 kHz Sensor
Arduino 101	Amazon Echo
Amazon Fire Phone	Samsung Phone
Dell XPS 13 (Ubuntu / Windows)	Samsung Gear VR

Our hardware lab would be located at **6th floor ICE lab**. Hardware comes at a first come, first serve basis.



### **3D printing and Laser Cutting**

Laser Cutting would be available from **9pm - 2am on 9/24 and 10am - 12nn on 9/25**. We are providing 32" x 18" x 1/8" acrylic for laser cutting. If you need laser cutting, please draft out your laser cutting plan on AutoCAD and save it in .dwg or .dxf format. Please email your laser cutting to [malladi@cooper.edu](mailto:malladi@cooper.edu).

3D printing will be available from 9pm - 2am on 9/24 and 6am - 9am on 9/25. For 3D printing, you can plan your design in Inventor and save it in .stl format. The design should be within a 10" cube. Please bring your designs in a USB to the laser cutting lab for 3d printing.

### **Suggested software installation:**

Hackathons are spaces where you can learn a new programming language, or utilize an API that you have never thought of before! Here are a list of software / API that we think you should try and take a look at. It's not mandatory to install everything, but just something to get you started in Hack Cooper:

Facebook Developer API: <https://developers.facebook.com/>

Autodesk Web API :

Google Go : <https://golang.org/>

Node.js : <https://nodejs.org/en/>

Unity Game Engine : <https://unity3d.com/>

Arduino IDE : <https://www.arduino.cc/en/Main/Software>

Android Studio : <https://developer.android.com/studio/index.html>

Eclipse IDE : <https://eclipse.org/downloads/>

Inventor : <http://www.autodesk.com/education/free-software/inventor-professional>

AutoCAD : <http://www.autodesk.com/education/free-software/autocad>