



TARTANHACKS

HOSTED WITH



BY SCOTTYLABS



[**KAHOO!**]

Join at [kahoot.it!](https://kahoot.it)



[TARTANHACKS 101]



WHAT IS TARTANHACKS?

And why it's better than any other Valentine's date!

- The biggest hackathon in CMU!
- Organized by [ScottyLabs](#).
- Hack in groups of 4 for 24 hours to come up with the coolest project.
- Incredible food, swag, and fun!





CHANNELS OF COMMUNICATIONS

Ways to stay connected



tartanhacks2020.slack.com



tartanhacks@scottylabs.org



Follow @cmu.scottylabs



Follow ScottyLabs



[FAQs]



NEED INTERNET?

Better than genuine human connection

- **FOR STUDENTS**

Connect to the **eduroam** WiFi network and connect
with your university email address and password

- **FOR SPONSORS**

Connect to the **CMU-GUEST** WiFi network with the
access code **QHASTQEVE**.



NEED HELP?

Use Slack, or our brand new mentor queue!

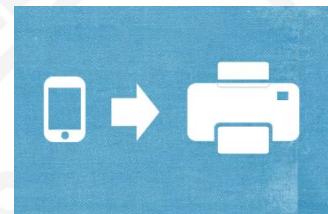
- **OPTION 1** (online queue)
Go to queue.tartanhacks.com and describe your problem and where you are located.
- **OPTION 2** (Slack)
Ping **#mentors** on Slack along with a description of your problem.



NEED IDEAS?

Get started with your project

- Find ScottyLabs' APIs at <https://scottylabs.org/#apis>.



- Attend **Crash Course!**

- **How to Hack**
- **Setting Up and Using APIs**
- **iOS and Mobile Development**

8:30 PM

8:50 PM

9:10 PM



NEED SPACE?

Places to hide away and hack

- UNIVERSITY CENTER (this building)
**Rangos Ballroom, Class of '87, Danforth Lounge,
Danforth Conference Room, Dowd, Pake, Caffee**
- GATES and NEWELL-SIMON HALL
**GHC 4211, 4215, 4301, 4315
NSH 3001, 3002, 3305 and Perlis Atrium ([iNoodle](#))**



NEED FRIENDS?

Find your love...?

- **SMASH COURSE**

Join the **Smash Tournament** in Danforth Conference Room at 10:00 PM!

- **TEAM MIXER**

Find **more teammates** in Connan Room right after the opening ceremony.



NEED FOOD?

Replenish your energy



and more....

You will need **wristbands** for food!



NEED HARDWARE?

Thanks to our hardware and electrical partner: Roboclub

- Ask us for power strips!
- **Roboclub will be able to provide parts and hardware in the UC LL89 in the basement.**





PROJECT SUBMISSION

Submit at <https://tartanhacks2020.devpost.com/>

- Your submissions are due **4:30 PM on DevPost**.
- This is where you specify your teams and choose your prize criterias.
- Showcase your projects during the **expo** on Saturday.
- Finalists will present at the closing ceremony to **faculty judges**.

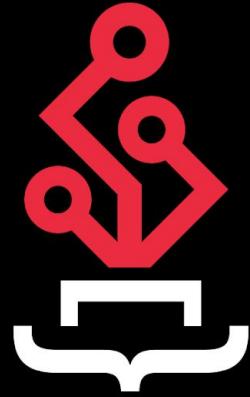




HELP HOTLINE

+1 (412) 294-8329

- This is an all-inclusive, beginner-friendly hackathon.
- **Zero tolerance policy** for harassment, abuse, or discrimination from hackers, mentors, sponsors, judges.
- Call or to the number at any time above if you are experiencing or witnessing harassment.



[**OUR PRIZES**]



FIRST PENGUIN AWARD

Take the first courageous leap

- Inspired by Randy Pausch's **The Last Lecture**:
"In a virtual reality course I taught, I encouraged students to attempt hard things and not worry about failing... 'The First Penguin Award' - to the team that took the biggest gamble while not meeting its goals... a prize for 'glorious failure.' Experience is what you get when you don't get what you wanted. And it can be the most valuable thing you have to offer."

SPICIEST MEME AWARD

[InSeRt SUb HeAdEr H3re]

- #random
- + AddiTionAl infOrMATIOn HERe



BEST VALENTINE'S HACK

For that special someone ❤️





BEST VALENTINE'S HACK

For that special someone ❤️

BEST SAFETY HACK

Receive up to monetary and technical support from ScottyLabs



BEST VALENTINE'S HACK

For that special someone ❤️

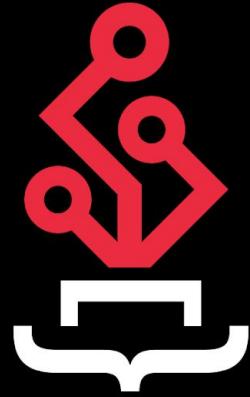
BEST SAFETY HACK

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SCOTT KRULCIK GRAND PRIZE

Receive \$2000 in cash!



[SPONSOR PRIZES]



BEST ENTREPRENEURIAL HACK

Anker Sound Core 2 Speakers!

BEST ALEXA HACK

Amazon Echo Show 8s!





BEST BEGINNER HACK

Sponsored by BNY Mellon



BNY MELLON

- Raspberry Pi Starter Pack
 - Technology Campus and Summer Analyst Program
- bnymellon.com/careers (1910946, 1906793)**



BEST ENVIRONMENT HACK

Sponsored by Nefeli Networks

- \$250 Amazon Gift Card!



NEFELI
NETWORKS



FOCUS ON CUSTOMER AWARD

Sponsored by Panopto

- Listen for what the customer wants, instead of telling them what they need
- Honestly pursue customer feedback for the purposes of improvement
- Know and anticipate the customer's needs and wants
- Make the customer's lives simpler
- Wow the customer



Panopto™

DICK'S Sporting Goods

Social Impact Prize

A close-up photograph of a person's face and hands. The person is looking down at a smartphone held in their right hand. The phone screen displays a fitness tracking app with a circular progress bar, the number '29 m', and the text '4.75 mi'. The person is wearing a black smartwatch on their left wrist. The background is blurred.

Best Sports Hack

#whytho

- We care a lot about Youth Sports
- But it's quickly declining in the U.S.
- We need to take action A\$AP



Possibilities? Limitless

- Use *technology!*
- Previous product categories we've seen:
 - *Donations, Sports Clinics, Sports Games, Social Networking, Data Analysis, etc*

Good Luck!

Reach out!

Varsity Hackathon Team

Learn more about tech opportunities at DSG

- Molly.Dymond@dcsq.com



2nd Place at PayPal's Hackathon



Winners from our internal Hackathon



BEST SOCIAL IMPACT HACK

Sponsored by Rockwell Automation

- OGIO Backpacks



**Rockwell
Automation**



BEST CAMPUS SAFETY HACK

Sponsored by Ness Digital Engineering

- Amazon Echo Shows



Ness
Digital
Engineering



Best Educational Hack

Focus: Campus Safety



TARTAN
HACKS
2020

Prize: Amazon Echo Show 8

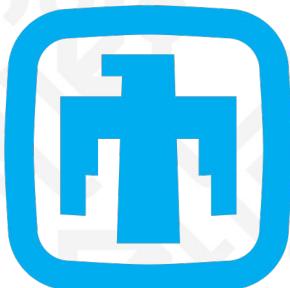




BEST SECURITY HACK

Sponsored by Sandia National Laboratories

- Bose SoundLink Color Wireless Speakers



**Sandia
National
Laboratories**



Best Financial Hack

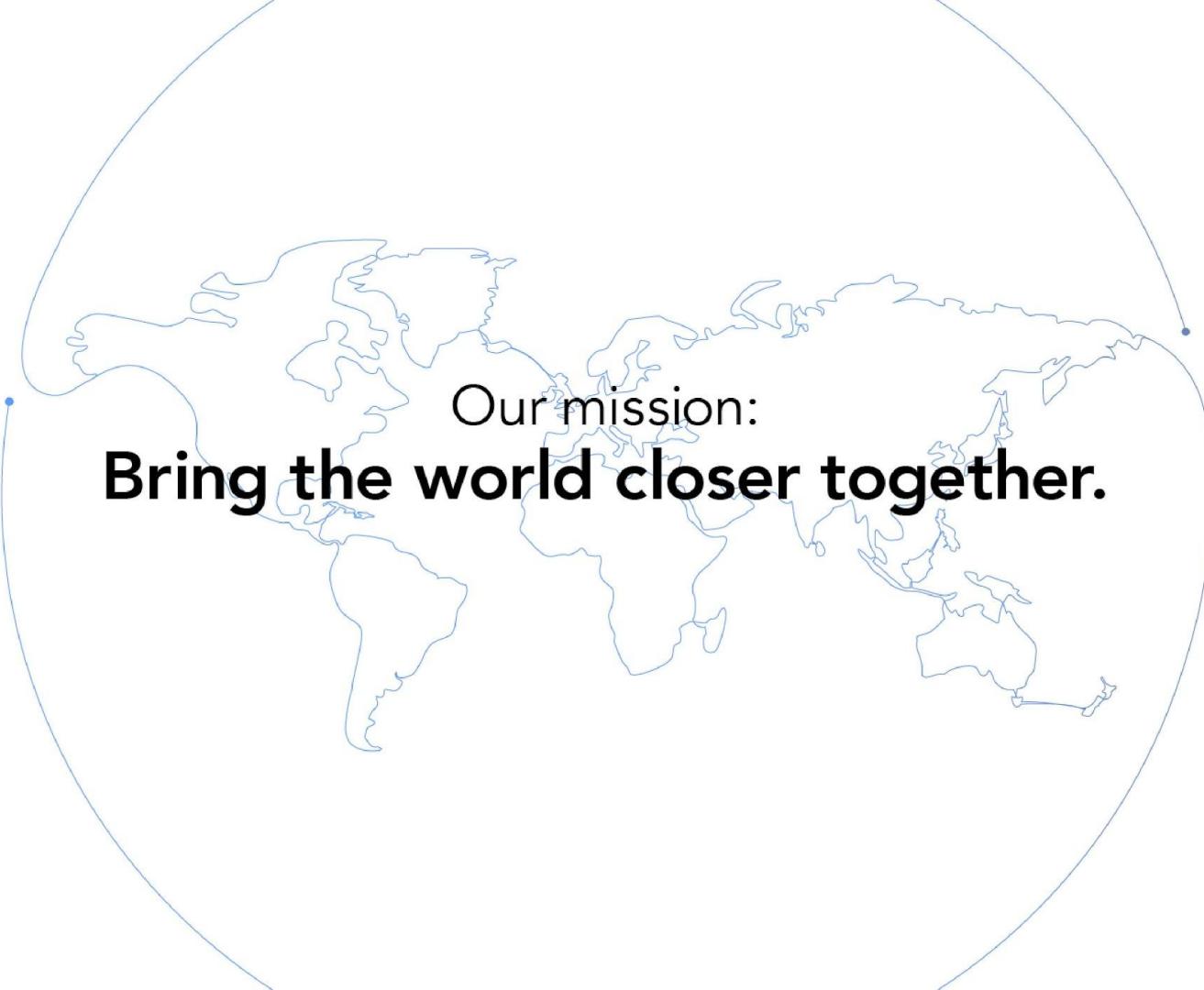
How will you
reimagine banking?

\$300 gift cards

from Amazon, to each
member of the winning
team



FACEBOOK



Our mission:
Bring the world closer together.

Facebook Family of Products

Connects over 2.5 Billion People



Facebook

2.3 Billion each month



Messenger

1.3 Billion each month



Instagram

1 Billion each month



WhatsApp

1.5 Billion each month



AR VR

Oculus & Portal



**BUILDING COMMUNITY:
People from all backgrounds rely on
Facebook to connect with others and we
better serve their needs with a more diverse
workforce too.**

FACEBOOK @ TartanHacks 2020

1 Oculus Go per team member for
“Best hack to solve community issues at scale”



FACEBOOK @ TartanHacks 2020

Developer Tools - developers.facebook.com

Learn how to get started with React - fb.me/learncreatereact

Check in at our booth to be entered into a raffle for swag and upload your resume to be considered for our opportunities!

[Software Engineer, University Grad \(Menlo Park\)](#)

[Software Engineer, Intern \(Seattle & Pittsburgh\)](#)

Or let us know what you're up to this summer!



Hello, TartanHacks!

Nitya Narasimhan, PhD

Senior Regional Program Manager
Cloud + AI | Developer Relations
Microsoft



nitya



msft-nitya



[TARTANHACKS]
FEBRUARY 14-15, 2020

We're excited to be here!

Swing by our booth & say hello! Check out our workshop!!

AI For Good Workshop

Today at 08:00pm

Speaker: Justin Garrett

Hack For Good Prize

\$1,000 USD Donation to charity of your choice! Surface Go's plus keyboards for each team member!

Check out our GitHub repos:

<https://aka.ms/HackWithAzure>

<http://aka.ms/webts>

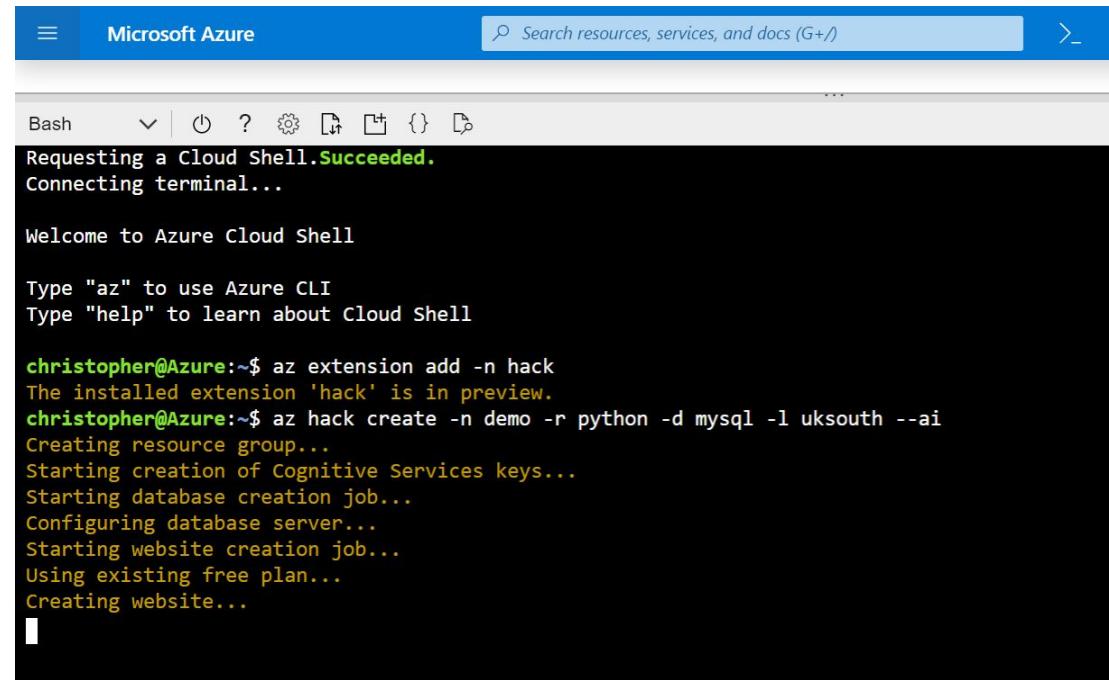
Claim your [\\$100 in free Azure credit](#) resources for you and your projects



az hack create

Command-line utility to
quickly bootstrap
commonly-used Azure
resources for hackathons

<https://aka.ms/HackWithAzure>



The screenshot shows the Microsoft Azure Cloud Shell interface. At the top, there's a blue header bar with the Microsoft Azure logo and a search bar that says "Search resources, services, and docs (G+/_)". Below the header is a toolbar with icons for Bash, Help, Settings, and others. The main area is a terminal window with a black background and white text. It starts with a message about requesting a Cloud Shell and connecting. Then it welcomes the user to the Azure Cloud Shell and provides usage instructions. Finally, it shows the output of the "az hack create" command, which adds the "hack" extension and creates a demo resource group with a MySQL database, an AI Cognitive Services key, a Python website, and a local git deployment.

```
Bash    ⚡ ? 🌐 🔍 { } 🔍
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

christopher@Azure:~$ az extension add -n hack
The installed extension 'hack' is in preview.
christopher@Azure:~$ az hack create -n demo -r python -d mysql -l uksouth --ai
Creating resource group...
Starting creation of Cognitive Services keys...
Starting database creation job...
Configuring database server...
Starting website creation job...
Using existing free plan...
Creating website...
```

Azure CLI Extension

Provisions:

- Database (MySQL, SQL, CosmosDB)
- Website (Python, Node.js, .NET, PHP)
- AI (Azure Cognitive Services)
- Local git deployment

Web Template Studio

Scaffold projects quickly with front end (React, Angular, Vue.js), backend (Node.js, Flask)

<https://aka.ms/webts>

<https://aka.ms/webtsinstall>

The screenshot shows the 'Web Template Studio' interface. At the top, there are five numbered steps: 1, 2 (highlighted in blue), 3, 4, and 5. Step 2 is labeled 'Add Frameworks'. Below this, there are two sections: 'Select a front-end framework' and 'Select a back-end framework'. In the front-end section, 'React v16.8.4' is selected. In the back-end section, 'Node/Express v10.15.0' is selected. Both sections include 'Learn more' links and checkmarks. At the bottom, a note says 'By continuing, you agree to the terms of all the licenses in the licenses section.' with 'Back' and 'Next →' buttons.

Create a new project

- Open VSCode
- Press `Ctrl + Shift + P` in Windows/Linux or `Shift ⌘ + Command ⌘ + P` in Mac to open VSCode's extension launcher
- Type/`Select Web Template Studio`: Launch and press `Enter` to launch the extension

Deploy the generated project

- Open VSCode
- Open the generated project
- Press `Ctrl + Shift + P` in Windows/Linux or `Shift ⌘ + Command ⌘ + P` in Mac to open VSCode's extension launcher
- Type/`Select Web Template Studio`: Deploy App and press `Enter` to begin the deployment

Built
by interns at Microsoft
Garage Vancouver
by students
for students



- ❖ Bootstrap applications
- ❖ Create Azure resources
- ❖ Deploy with one click



Innovative projects from student teams across the globe

Student developers bringing their ideas to life with Azure

Bring your idea to the next level with mentorship, prizing, and travel

World Championships in May 2020 at Microsoft Build, Seattle.

Learn More

ImagineCup.com



Microsoft Student Partners

Be a force for good –
locally and globally

Student Partners are influencers! A global group of on-campus ambassadors who are eager to help their fellow students, lead in their local tech community, and develop technical and career skills for the future.

1100+ universities

70+ countries



Organizing events

- Budget, Venue & Date
- Track registrations (Eventbrite)
- Promote through Social Media
- Announce at least 2 weeks before
- Send Reminders
- Know when to quit

Thank You!
We can't wait to see
what you build today!



<https://aka.ms/HackWithAzure>

<http://aka.ms/webts>

<https://azure.microsoft.com/en-us/free/students/>

<https://studentpartners.microsoft.com/en-us>



TARTANHACKS CHALLENGES

Sponsored by Emirates

- Visit [tartanhacks.com/challenges.html!](http://tartanhacks.com/challenges.html)
- Alternate Payment Methods
- Skywards Roving Agent
- Using VR/AR/Mixed Reality to Improve Sales Presentations
- Flight tickets to Dubai and Gift Hampers

Bloomberg

{ string&&loop }

 Sketch



UltraPress
Quality Custom Apparel

 repl.it

Ritual
ENERGY





WHAT'S NEXT?

Explain Like I'm CS Major

```
if (self.have_team()):  
    self.goto("Rangos Ballroom") # 2nd Floor  
    self.eat_food(rangos)  
else:  
    self.goto("Connan Room")      # Registration Room  
    self.eat_food(connan)  
self.hack()  
time.sleep(81000)  
self.hack(end=True)
```



[**HAVE FUN!**]