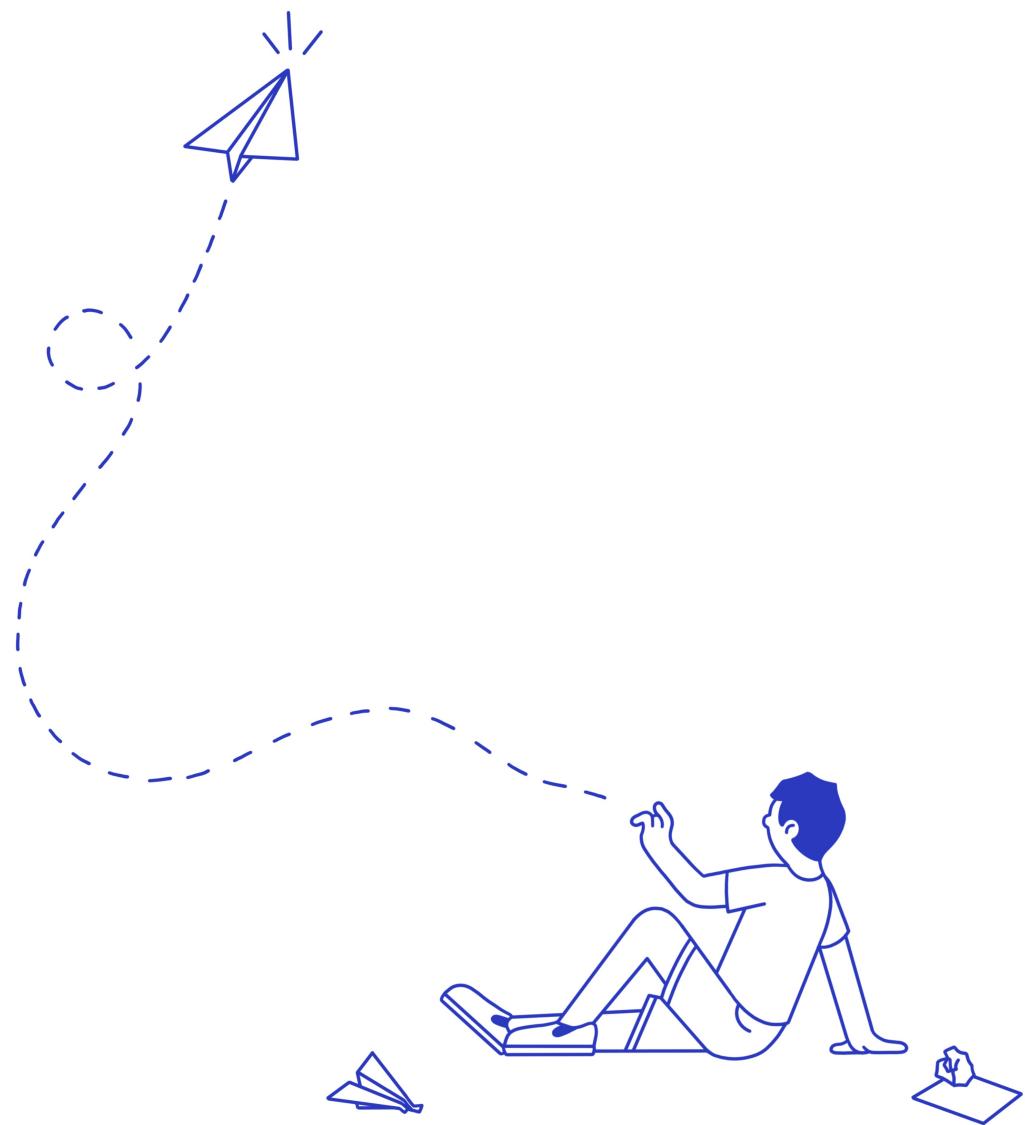




# DUBHACKS

## Informational Packet



# Schedule

## SATURDAY

11:00AM	Registration	Street
11:00AM	Lunch	Street
12:00PM	Opening Cermony	Ballroom
1:15PM	<i>Microsoft Workshop</i>	Room 214
1:00PM	Team Formation	Street
1:00PM	Hacking Begins	
1:00PM	Hardware Room Opens	Room 245
2:15PM	<i>Google Workshop</i>	Room 214
3:15PM	Puppies	Street
7:00PM	Dinner by AI2	Street
9:30PM	Late Snack by Bloomberg	HUB Lawn
10:00PM	AI2 Incubator Arcade	Basement
10:00PM	Sleep Room Opens	Room 214

## SUNDAY

7:30AM	Breakfast	Street
10:00AM	Submit Projects to DevPost	
10:30AM	Lunch	Street
12:15PM	Judging	Ballroom
2:00PM	Closing Ceremony	Ballroom

# Workshops

**Saturday @ 1:15PM**  
**Room 214**

## **Microsoft: MRTK 101 / FAQ**

How to use Mixed Reality Toolkit Unity for Basic Interactions (HoloLens 2, HoloLens, Windows Mixed Reality, Open VR). Learn about how to use MRTK to achieve some of the most widely used common interaction patterns in mixed reality. Learn how to simulate input interactions in Unity editor, how to grab and move an object and many more interactions.

### **Workshop Pre Requisites:**

- + Visual Studio 2019**
- + Unity 2018.4.x, 2019.1.x or 2019.2.x**
- + Latest MRTK release**
- + Windows SDK 18362+.**

# Workshops

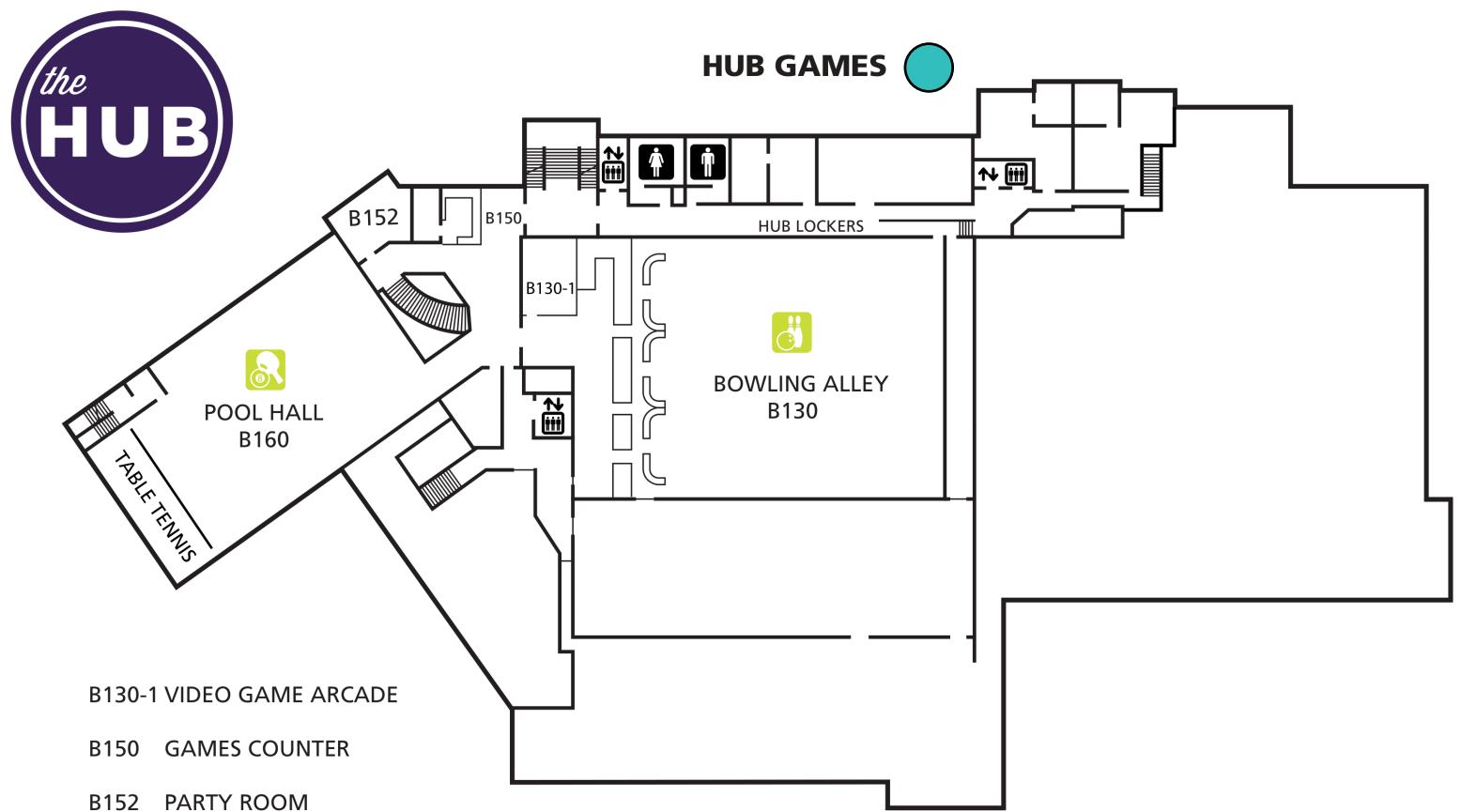
**Saturday @ 2:15PM**

**Room 214**

## **Google: Three Powerful Google Cloud Products for Your Project**

Chat about Google Cloud computing and Google Cloud Platform, this talk highlights App Engine, Machine Learning APIs, and Cloud Firestore. For each product, there are interactive demos and example use cases.

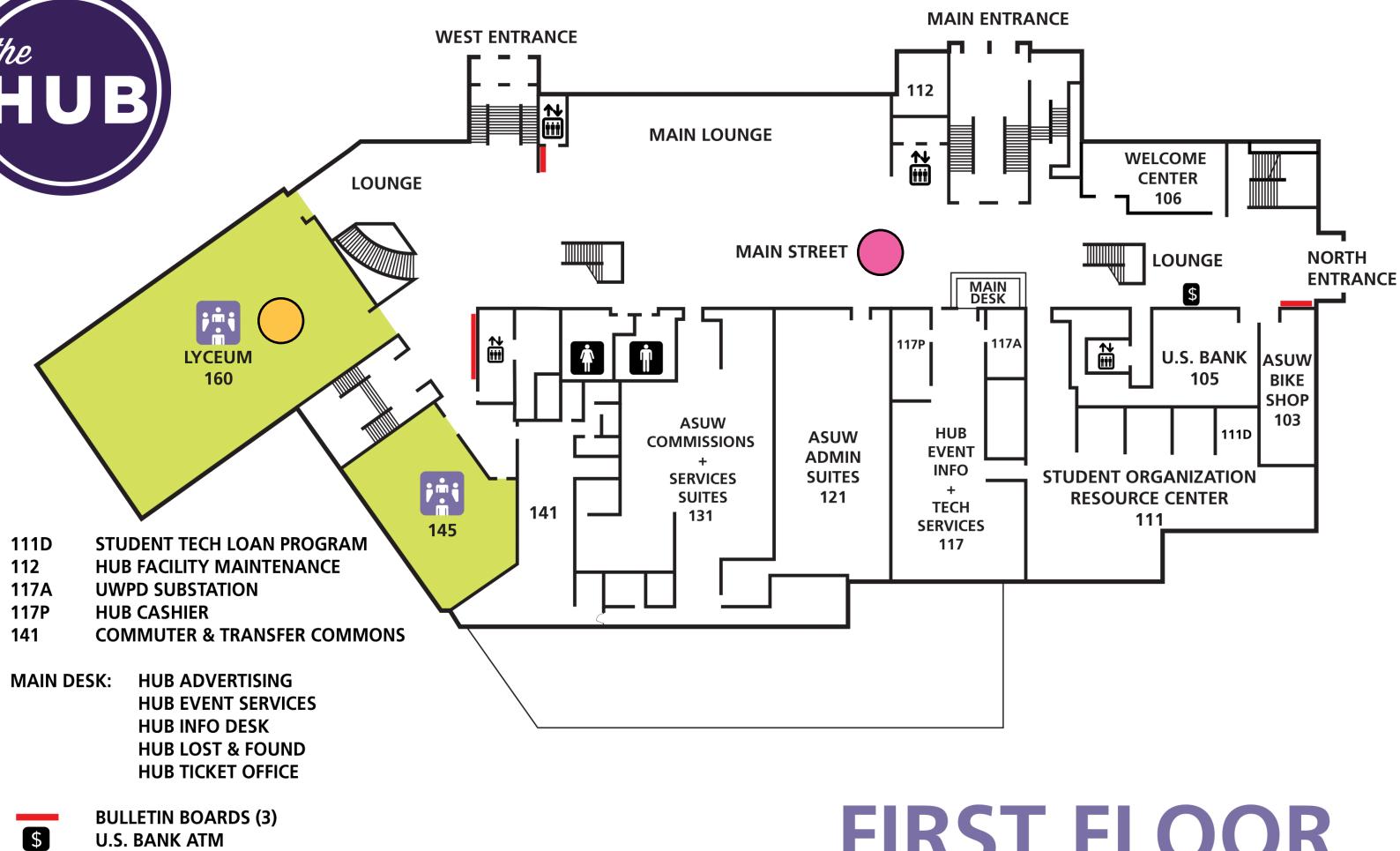
# Map - Basement



**BASEMENT**

**AI2 Incubator Arcade: Gaming space**

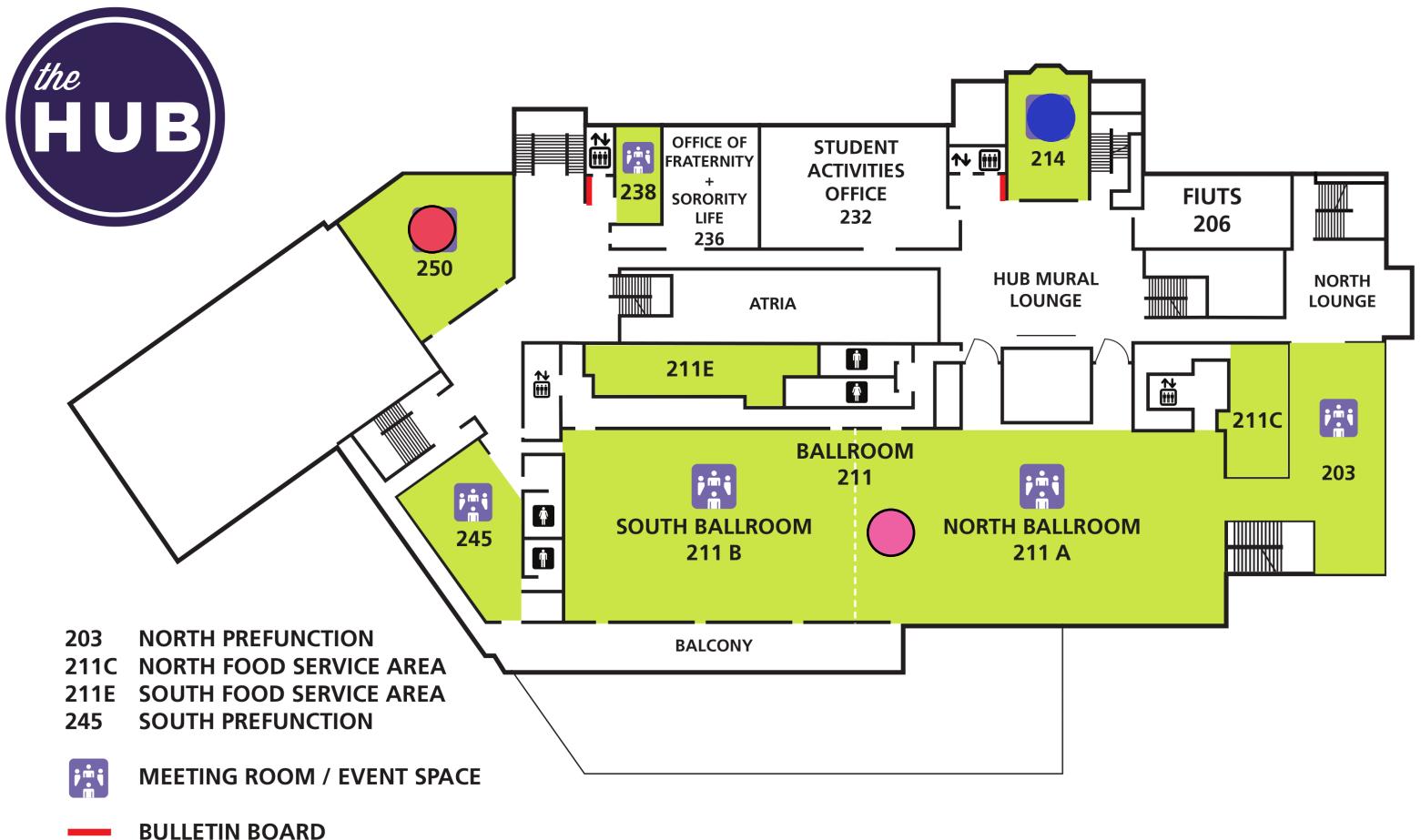
# Map - First Floor



**Street:** Check in and food distribution

**Lyceum:** Hacking space

# Map - Second Floor



**SECOND FLOOR**

**Ballroom:** Main hacking space

**Room 214:** Workshop and sleeping room

**Room 250:** Team formation and hacking space

# Prizes

## Classic Track

Our ability to make a difference in our communities depends on our individual experiences and backgrounds. This track gives you the freedom to tackle the social good issue most important to you in whatever way you wish. Each winning team member will receive their choice of one of the following: **Go Pro Hero 6, Bose SoundLink Around Ear Wireless Headphones II, Switch Lite or AirPods.**

## Data Track

Data is being generated faster than ever with every click, tap, and swipe on your screen. This track focuses on finding ways to understand and utilizing this data to inform and empower others. Each winning team member will receive their choice of one of the following: **Go Pro Hero 6, Bose SoundLink Around Ear Wireless Headphones II, Switch Lite or AirPods.**

## Community Track

Technology is a powerful platform that can help us identify and address issues of inequality and accessibility within our local and global communities. In choosing this track, you are working to create a solution that assists a community you care about. Each winning team member will receive their choice of one of the following: **Go Pro Hero 6, Bose SoundLink Around Ear Wireless Headphones II, Switch Lite or AirPods.**

# Sponsor Prizes

## Azure Champ Prize

Build a project developed using Microsoft Azure that addresses a clear need, problem, or opportunity. Your project should include innovations in technical design and/or implementation of services (e.g., Cognitive Services, Bot Services, IoT Hub, Functions) and/or user experience. Don't forget to define a clear target market or audience! Winners will receive **automatic entry in the upcoming Imagine Cup Semi-Finals and two chances to become one of the few elite teams at our regional finals, plus Surface GOS for each team member!**

## Entrepreneurship Track by AI2 Incubator

This track is for teams that aspire to be founders of their own (real!) startup one day. Extra points if your project involves the use of A.I. in some capacity. **Winning team members will each receive a \$500 Visa gift card (up to four)!**

## Best Use of Xnor's AI2Go SDK

The most interesting project that uses our AI2Go SDK in their team's project, will win a **Raspberry Pi Computer Vision Starter Kit for each team member!**

# MLH Prizes

## Best use of Google Cloud

Build your hackathon project with a suite of secure storage, powerful compute, and integrated data analytics products provided by Google Cloud. See full list of products here: [g.co/cloud](https://g.co/cloud). Each winning team member will receive a **Google Home Mini**.

## Best Domain Registered with Domain.com

Register a domain using Domain.com during the weekend. Each team may submit one entry per person on the team. Each winning team member will receive a **Domain.com branded backpack**.

## Best UiPath Automation Hack

Build an automation hack using UiPath! Each winning team member will receive a **DROCON Drone & UiPath/MLH Branded Backpack**.

# Final Judges



**Jacob Colker**

Managing Director

@ Allen Institute for Artificial  
Intelligence Startup Incubator



**Pablo Veramendi**

Senior Technology Evangelist

@ Microsoft



**Catherine Nelson**

Senior Data Scientist

@ SAP Concur

# Hardware & API Info

## Room 245

### Large Hardware

5 Amazon Echo Dots  
3 Amazon Echo Show  
6 Raspberry Pi 4 B Kit  
8 Arduino (101 or Uno) + Base Shield Kit  
4 FitBit

7 Leap Motion  
6 Oculus Rift  
2 Alienware  
1 Dell XPS 13 (Windows) 1  
1 Dell XPS 13 (Ubuntu)  
7 Google Home Mini

### Digi-key Components

4 Wire Spools  
1 Ceramic Capacitors BC3213-ND  
1 Resistor Kit RS125-KIT-ND  
1 NFC/RFID Breakout 1528-1781-ND  
1 Touchscreen Display 1613-1134-ND  
2 Digital Multimeter MN35-ND  
1 Wire Strippers K604-ND  
1 Flush Cutters 170MN-ND  
1 Needle Nose Pliers 243-1215-ND  
2 Logitech Webcam

4 DC Gearbox  
4 Grove LCD  
3 IR Break Beam Sensor 1528-2526-ND  
2 Soil Moisture Module 1568-1360-ND  
7 Grove Vibration Sensor  
2 Snappable Protoboard 1568-1129-ND  
4 Breadboard large  
4 Breadboard small  
1 Curved Tweezers EROP7SA-ND  
1 Pointed Tweezers EROPAASA-ND  
2 Mini Spy Camera 1528-1799-ND  
3 Grove Stepper Motor  
4 9g Micro Servo

For more information about APIs available:

<https://hack.mlh.io/software/>

# DUBHACKS

Thanks for reading!

If you have any questions  
please ask away in the  
**#ask-organizers**  
Slack channel!

