



# ME 327: Design and Control of Haptic Systems

## Spring 2020

# Interactive Session I: Introductions

Allison M. Okamura  
Stanford University

**How will this work as  
an online class?**

# Communications

Pre-recorded lectures  
(approx. 45 minutes twice a week)

Interactive sessions  
(approx. 30 minutes twice a week)

Office hours  
(approx. 8 hours a week)

Canvas discussion boards

# Zoom Etiquette

For interactive sessions

For office hours

# Live Polling

Today we will try Poll Everywhere

go to [pollev.com/haptics](https://pollev.com/haptics)

or

text **haptics** to 22333 once to join  
and then text your response  
(response might be a letter, a word, etc.)

When poll is active, respond at [Pollev.com/haptics](https://Pollev.com/haptics)

Text **HAPTICS** to **22333** once to join

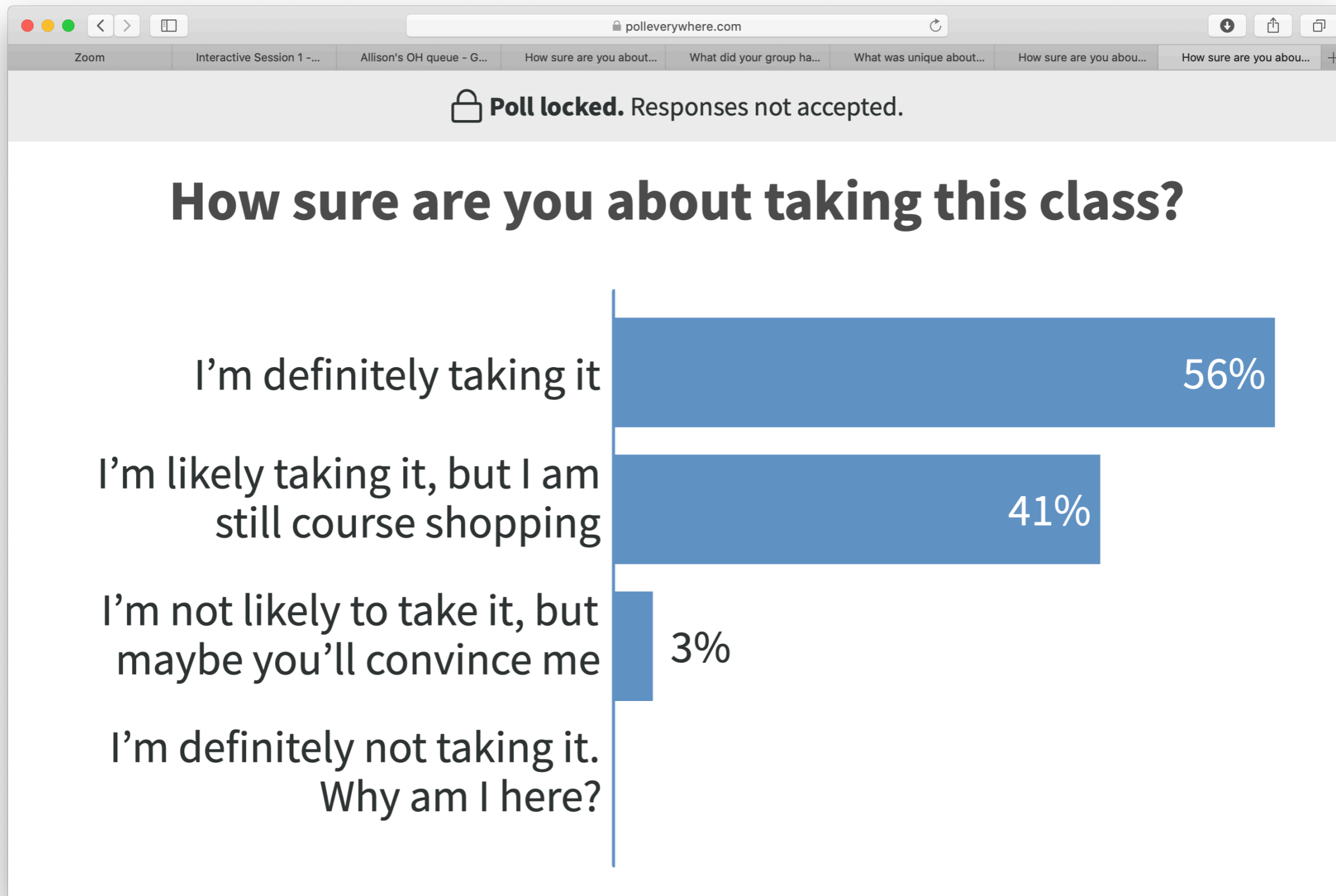
## How sure are you about taking this class?

I'm definitely taking it

I'm likely taking it, but I am still course shopping

I'm not likely to take it, but maybe you'll convince me

I'm definitely not taking it. Why am I here?



# Assessments

- 50% Assignments  
(one each week)
- 30% Quizzes  
(total of 3)
- 20% Group Activities  
(paper presentation  
and haptic demo)

need 50% on  
each component  
for an “S”

# Hapkits

We will mail each student a Hapkit  
(\$50 course fee to offset hardware cost paid via Axess)



# Teaching Staff

# Allison Okamura

(call me Allison!)

BS ME UC Berkeley 1994

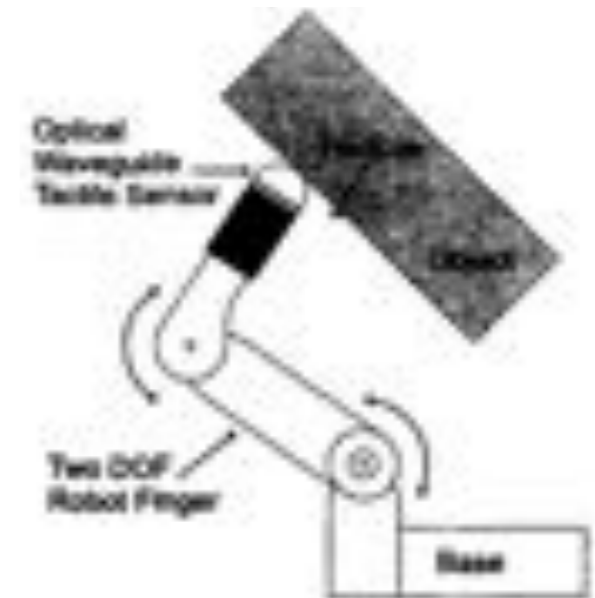
MS ME Stanford 1996

PhD ME Stanford 2000

Moonlighting at Immersion

Johns Hopkins 2000-2011

Stanford 2011-present



# Allison Okamura

## Collaborative Haptics and Robotics in Medicine Lab

Warning: Interactive  
sessions may be  
interrupted by my kids!



# Brandon Ritter

(call him Brandon!)



BS ME Stanford  
Graduating with his  
MS this quarter

More from Brandon...

# Zonghe Chua

(call him Zong!)



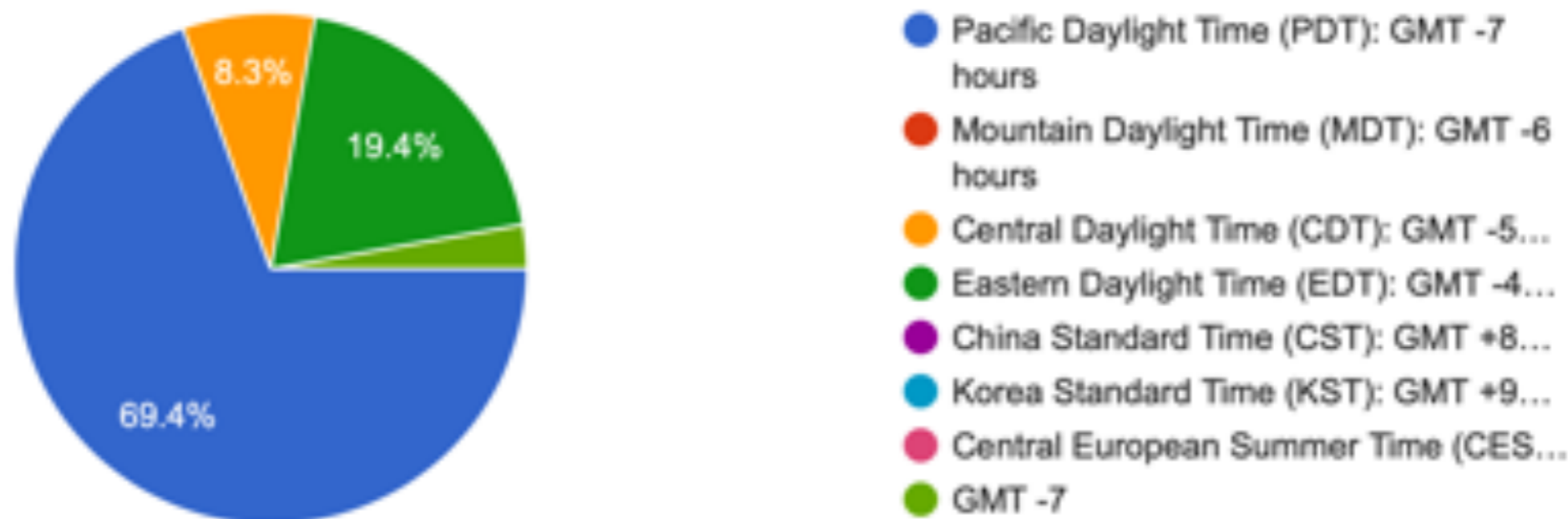
BS ME Illinois  
3rd year PhD student

Collaborating with  
Intuitive Surgical to  
understand the role of  
haptics in surgery and  
surgical training

You

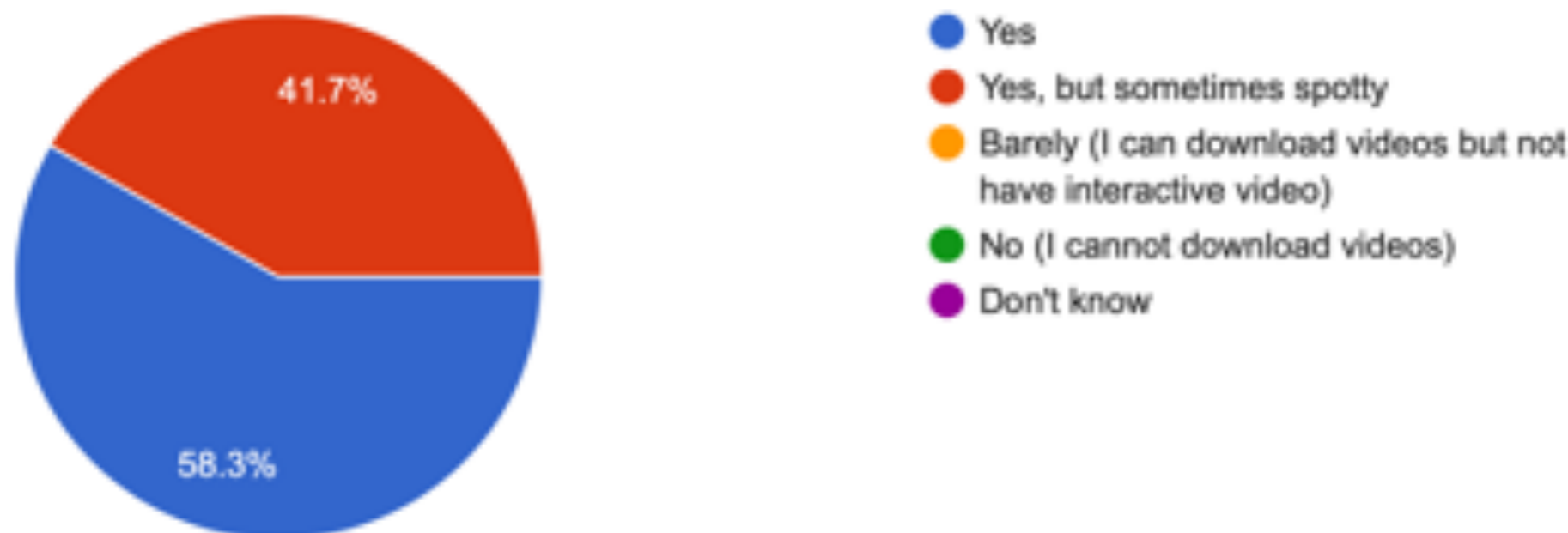
What is your timezone? Please select one of the time zones below, or choose "Other" and specify your time zone and GMT +/- hours.

36 responses



Do you have access to reliable Internet connectivity?

36 responses



# Breakout Rooms

Now we will try splitting you into groups of approximately 4 students, and having you engage in a breakout session

In this session, figure out:

What is one thing you have in common?

What is one thing unique to each individual in the group?

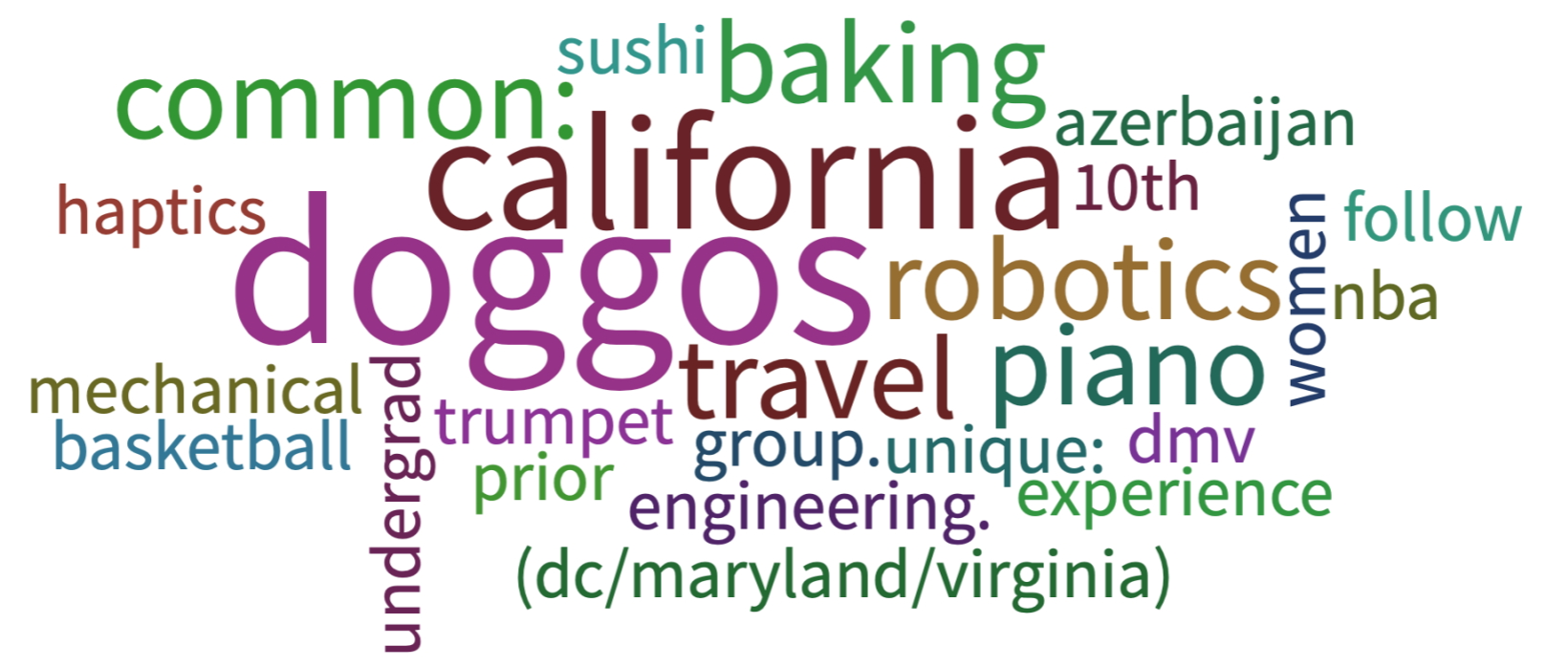
enter your one-word answer at [pollev.com/haptics](https://pollev.com/haptics) or  
[text **haptics** to 22333 once to join and then]  
text your one-word response

polleverywhere.com

Zoom Interactive Session 1 - Goog... Allison's OH queue - Google... How sure are you about taki... X What did your group have in... What was unique about you... How sure are you about taki...

When poll is active, respond at **PollEv.com/haptics**  
Text **HAPTICS** to **22333** once to join

# What did your group have in common? (One answer per group, try to use a single word)



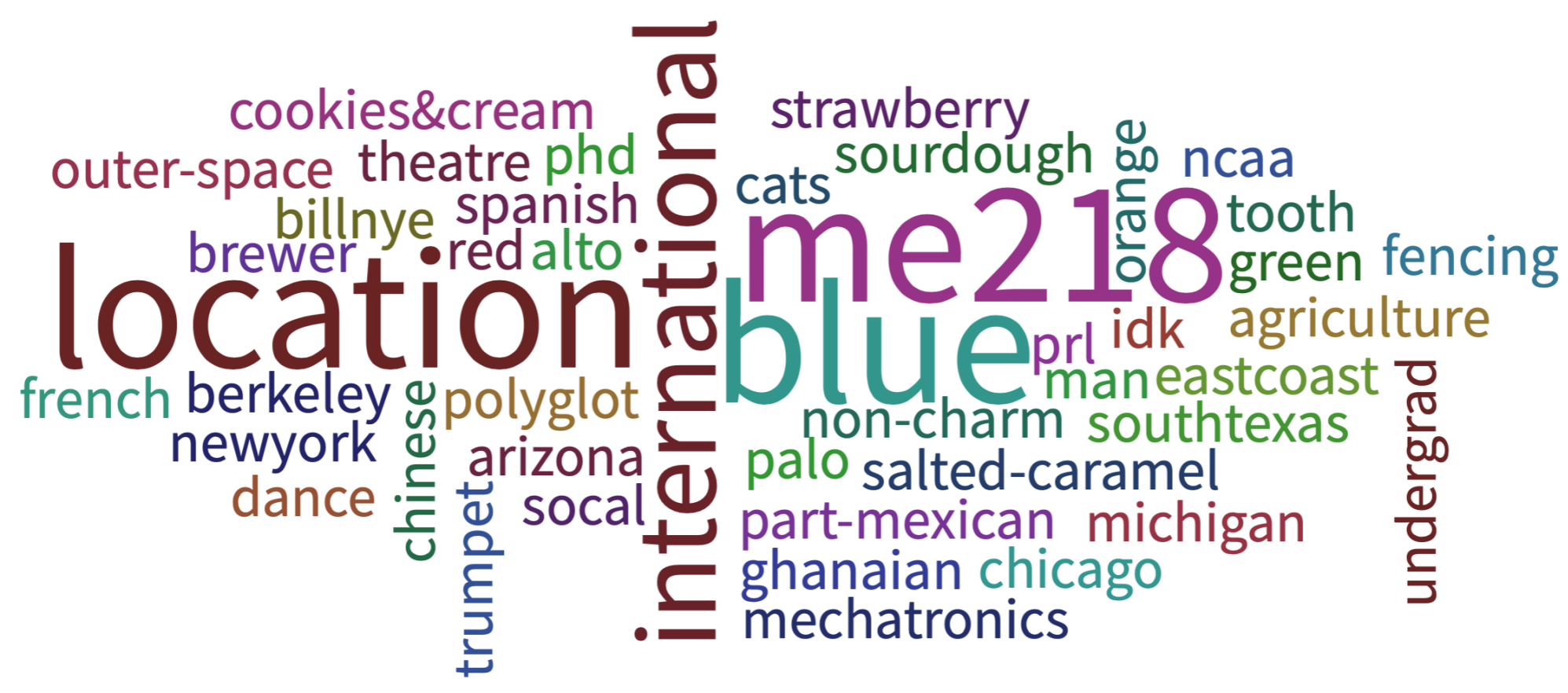
A word cloud of responses to the poll question. The words are of various sizes and colors, arranged in a roughly circular shape. The most prominent words are 'doggos' (large purple), 'california' (large brown), 'baking' (large green), 'travel' (large brown), 'piano' (large green), 'robotics' (large orange), 'common:' (large green), 'sushi' (medium blue), 'azerbaijan' (medium green), '10th' (medium brown), 'follow' (medium green), 'nba' (medium brown), 'women' (medium blue), 'dmv' (medium purple), 'experience' (medium green), 'engineering.' (medium purple), '(dc/maryland/virginia)' (medium green), 'prior' (medium green), 'trumpet' (medium purple), 'group.unique:' (medium purple), 'undergrad' (medium purple), 'basketball' (medium blue), 'mechanical' (medium green), 'haptics' (medium brown), and 'haptics' (medium brown).

Zoom Interactive Session 1 - Goog... Allison's OH queue - Google... How sure are you about taki... What did your group have in... X What was unique about you... How sure are you about taki...

Respond at **PollEv.com/haptics**

Text **HAPTICS** to **22333** once to join, then text your message

# What was unique about you? (Each student please respond, use a single word)



A word cloud visualization of student responses to the question 'What was unique about you?'. The words are arranged in a circular pattern, with the most frequent words being 'location', 'international', 'me218', and 'blue'. Other words include 'cookies&cream', 'outer-space', 'theatre', 'phd', 'spanish', 'red', 'alto', 'brewer', 'billnye', 'cats', 'strawberry', 'sourdough', 'ncaa', 'tooth', 'green', 'fencing', 'agriculture', 'prl', 'idk', 'maneastcoast', 'southtexas', 'palo', 'salted-caramel', 'part-mexican', 'michigan', 'ghanaian', 'chicago', 'mechatronics', 'undergrad', 'soccal', 'arizona', 'trumpet', 'chinese', 'polyglot', 'berkeley', 'newyork', 'dance', 'french', 'orange', and 'undergrad'.

# That's it!

Make sure to watch the posted lecture videos *before* Thursday's interactive session

You are welcome to stay for Office Hours/Q&A with Allison until 10 am.

Question queue:

<https://tinyurl.com/HapticsAllison>