# **Intro to Programming (No Prior Experience)**

CSCI-UA.0002-010

Emily Zhao

T/R 2:00PM - 3:15PM

# Emily Zhao (she/her)

# **Background**

- BFA in Film + Television Production
- MPS in Interactive Telecommunications (aka Art + Tech)

### **My Work**

- Computationally generated visuals
- Text and storytelling in the browser
- Games + other interactive experiences

# **Code has so many different applications!**

# Let's get to know you!

pollev.com/emilyzhao



# Rules of Play — Be on time

- Respect your peers + respect yourself
- Don't be afraid to ask questions; any and all

# **Ask questions**



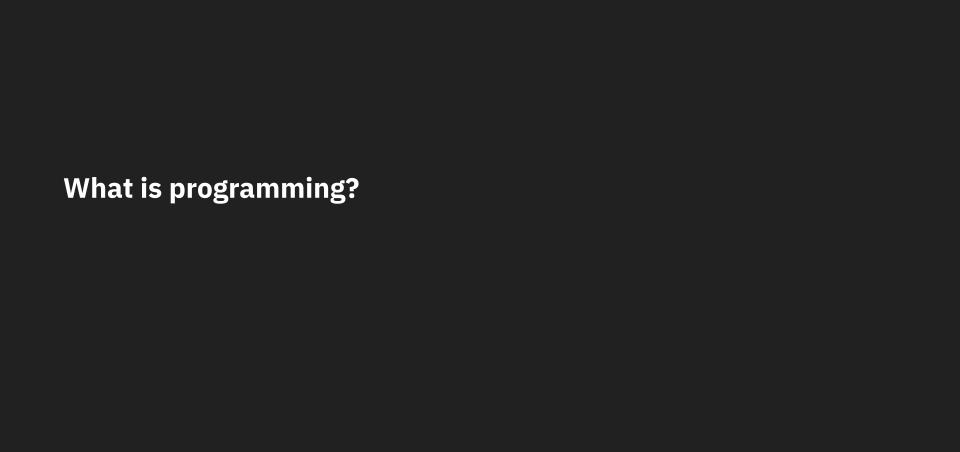
## **How class works**

- Lectures are in the modules
- Class time is for review + further practice
- Weekly programming workshop for assignments

# **Class Website**

https://emilydidthis.github.io/ CSCI-UA.0002-Spring23/





# What is programming? — Instruction for the computer to perform certain tasks



### A human will do it with uncertainty. Draw a rectangle.

A computer will refuse.



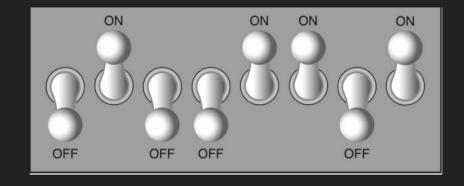
# Code as a <u>language</u> — The language of being specific

The language of being specificThe language of abstraction

# Computers aren't smart.

## It's all ones and zeros

- Binary language: "0" and "1" (which really correspond to electrical impulses +5v / -5v)
- Bit: 1 | Byte: 01001011
- 1 byte has the possibility of 256 unique "states"



# Punch Card in Punch Card Machine





**Computers aren't smart.** 

They're just really really really really fast (now)!



# Activity: The Language of Being Specific

On the class website, under our M/W schedule tab, there should be a link to a <u>Random Sketch</u> under the materials column.

With the person(s) sitting beside you:

- 1. Change the random seed to a number of your choice
- Write up a description (in English) of the sketch. The goal is to get me (your mock computer) to recreate the sketch as accurately as possible.
- 3. Be **SPECIFIC**! You have 10 minutes.

# **Python**

- This semester we will be working with Python
- Used extensively as both a teaching language and a production language
- IDLE: Integrated Development
  Environment



# For next time

— Peruse the class website, common syllabus, and Brightspace

— Begin "Self-Paced Learning Module #1" and take the quiz