

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

**CSCI-UA.0002-009**

Emily Zhao

M/W 2:00PM – 3:00PM

## **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](https://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/](https://emilydidthis.github.io/CSCI-UA.0002-Spring23/)



**What is programming?**



## **What is programming?**

- Instruction for the computer to perform certain tasks

**Draw a rectangle.**

**Draw a rectangle.**

- A human will do it with uncertainty.
- A computer will refuse.

**Code as a language**

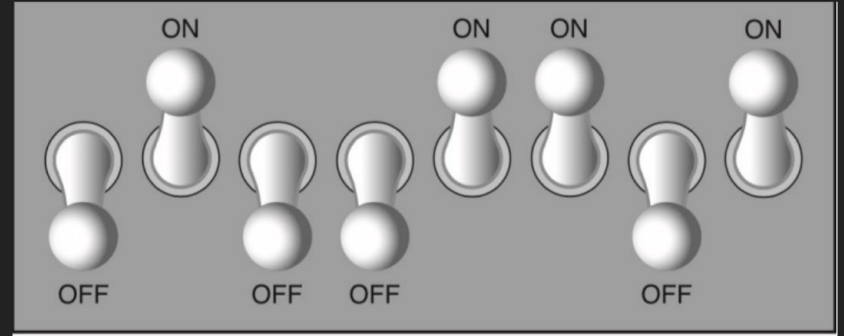
## Code as a language

- The language of being specific
- The 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"



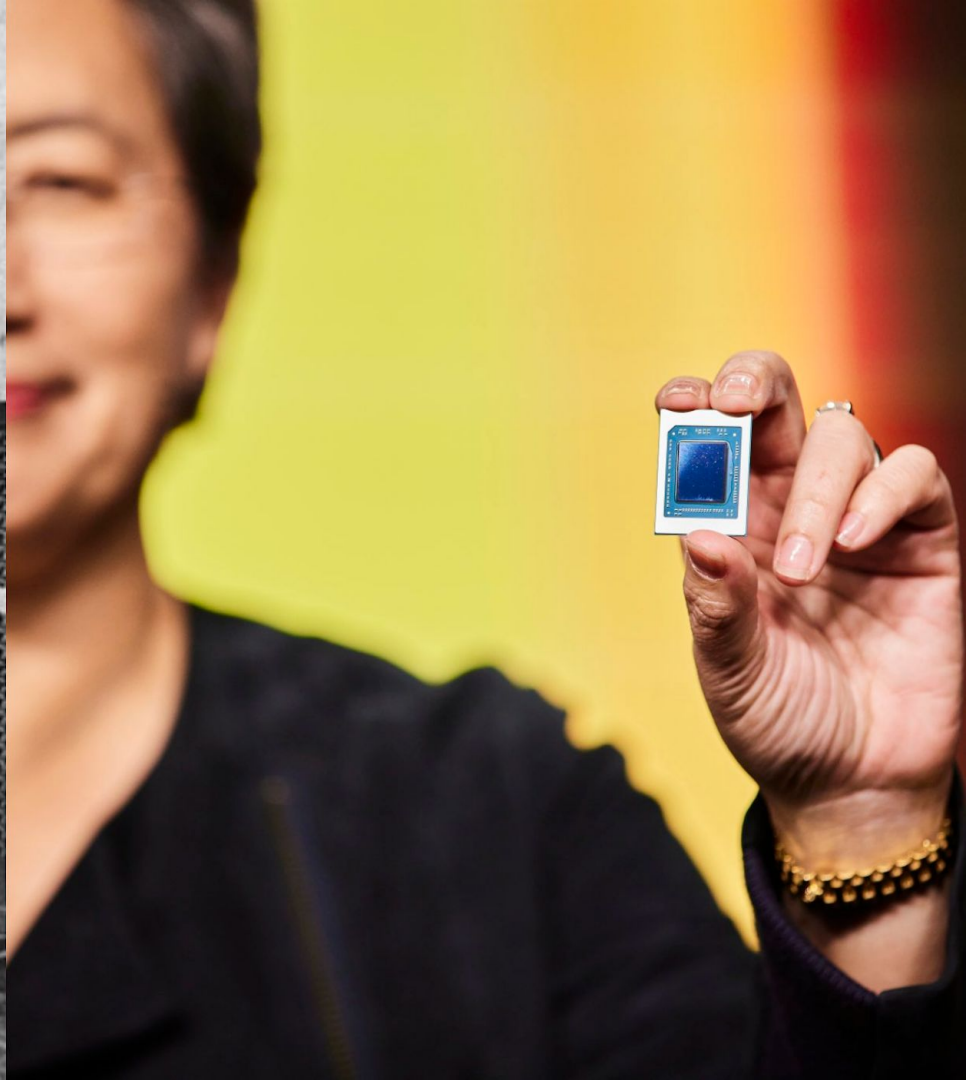
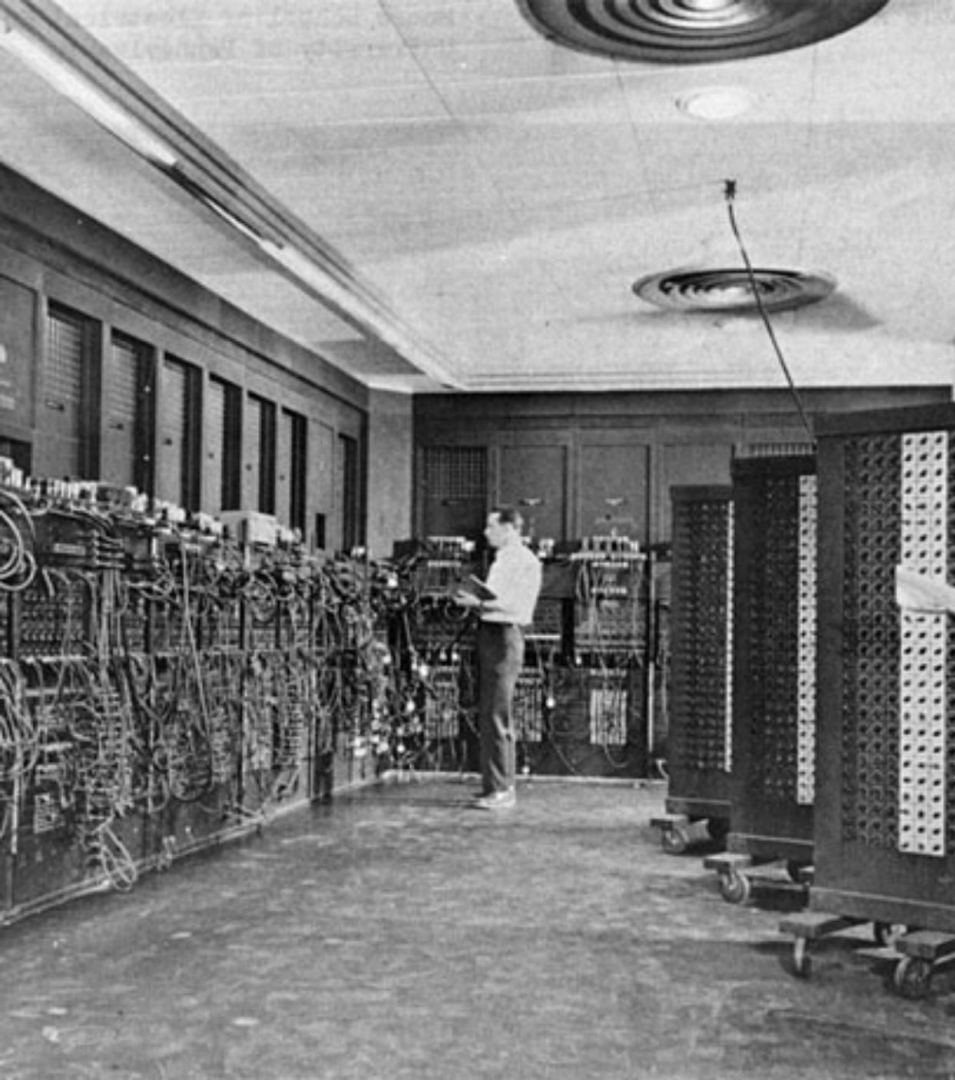
## Punch Card in Punch Card Machine





**Computers aren't smart.**

**They're just really really really really 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 Random Sketch under the materials column.

With the person(s) sitting beside you:

1. Change the random seed to a number of your choice
2. 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