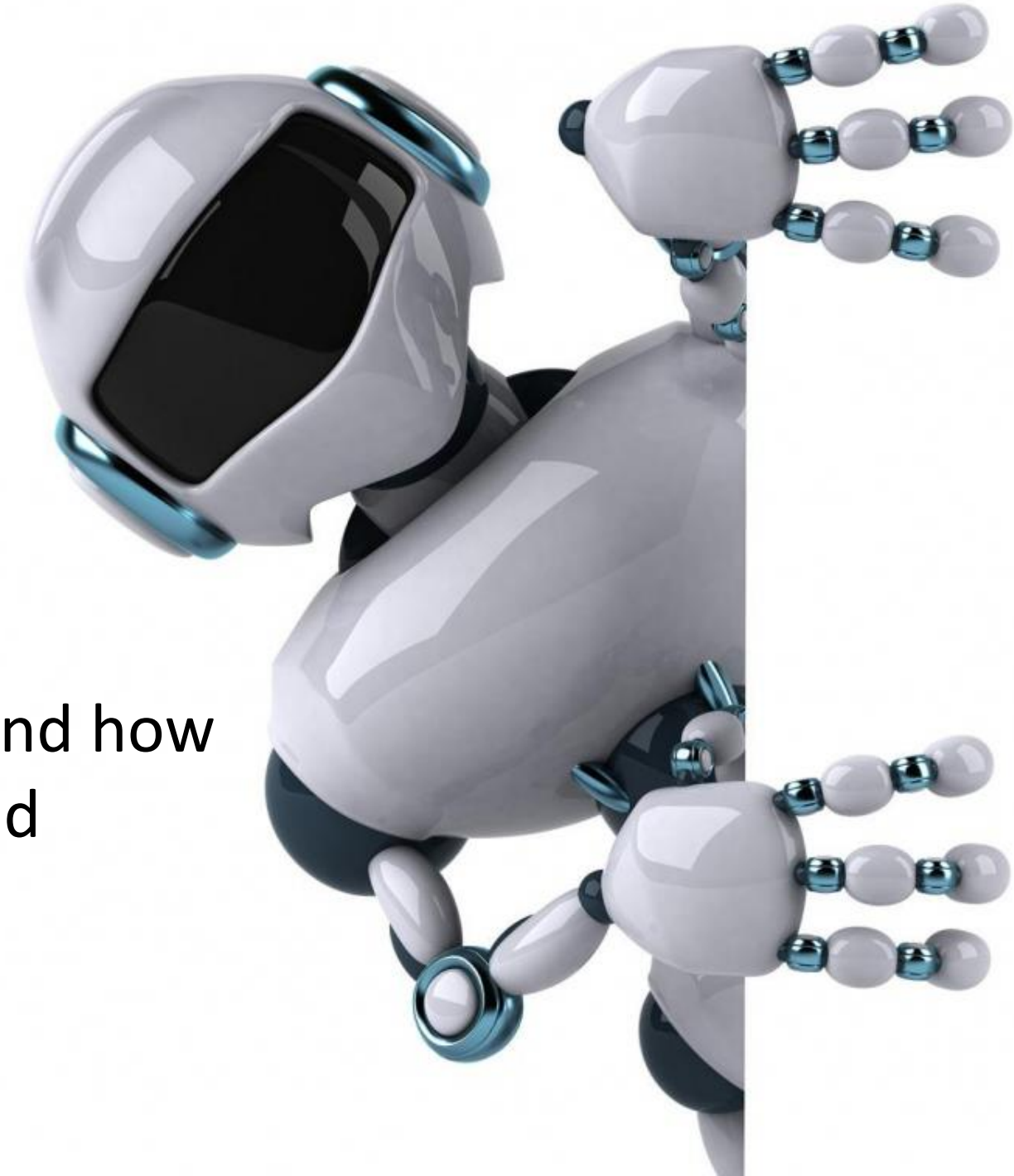
Presented by
A. Anaya

Exploring the World of Coding

Learn about the world of coding and how it is making an impact on our world



What is code?

- A system of signals or symbols
- A way to convey a secret
- A set of instructions
- A personal philosophy

Code, as it relates to computer programming

- A set of instructions written in a particular programming language

C: > Users > harsh > Desktop > Work > work.cpp > ...

```cpp
#include<iostream>
using namespace std;

int main()
{

    cout<<"Hello World!"<<endl;
    return 0;
```

PyCharm File Edit View Navigate Code Refactor Run Tools VCS Window Help

HelloWorld [~/PycharmProjects/HelloWorld] - .../app.py

HelloWorld > app.py

app.py

```python
birth_year = input("Enter your birth year: ")
age = 2020 - int(birth_year)
print(age)
```

PyCharm File Edit View Navigate Code Refactor Run Tools VCS Window Help

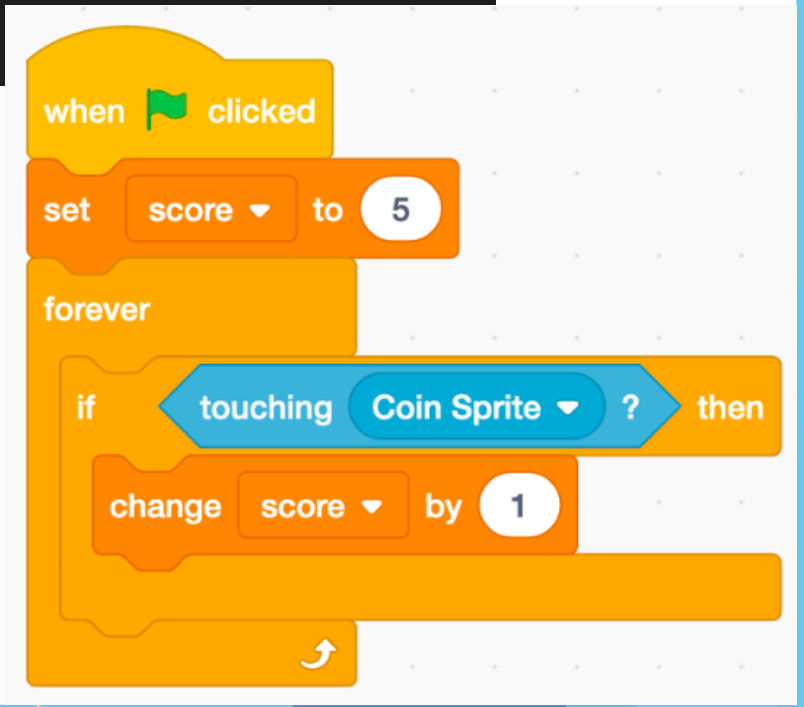
HelloWorld [~/PycharmProjects/HelloWorld] - .../app.py

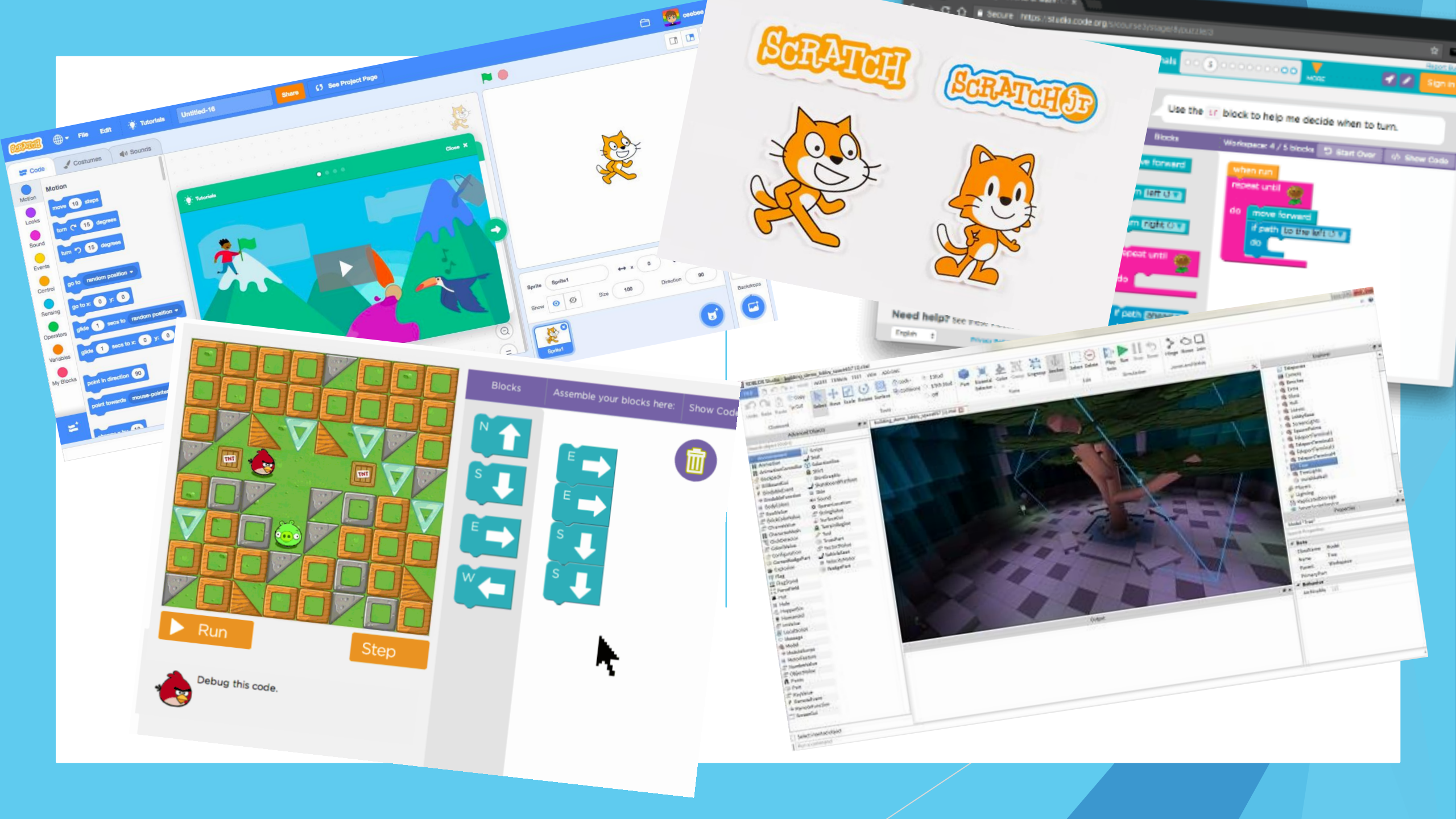
HelloWorld > app.py

app.py

Run: app

```
/Users/moshfeghhamedani/PycharmProjects/HelloWor
Enter your birth year: 1982
38

Process finished with exit code 0
```

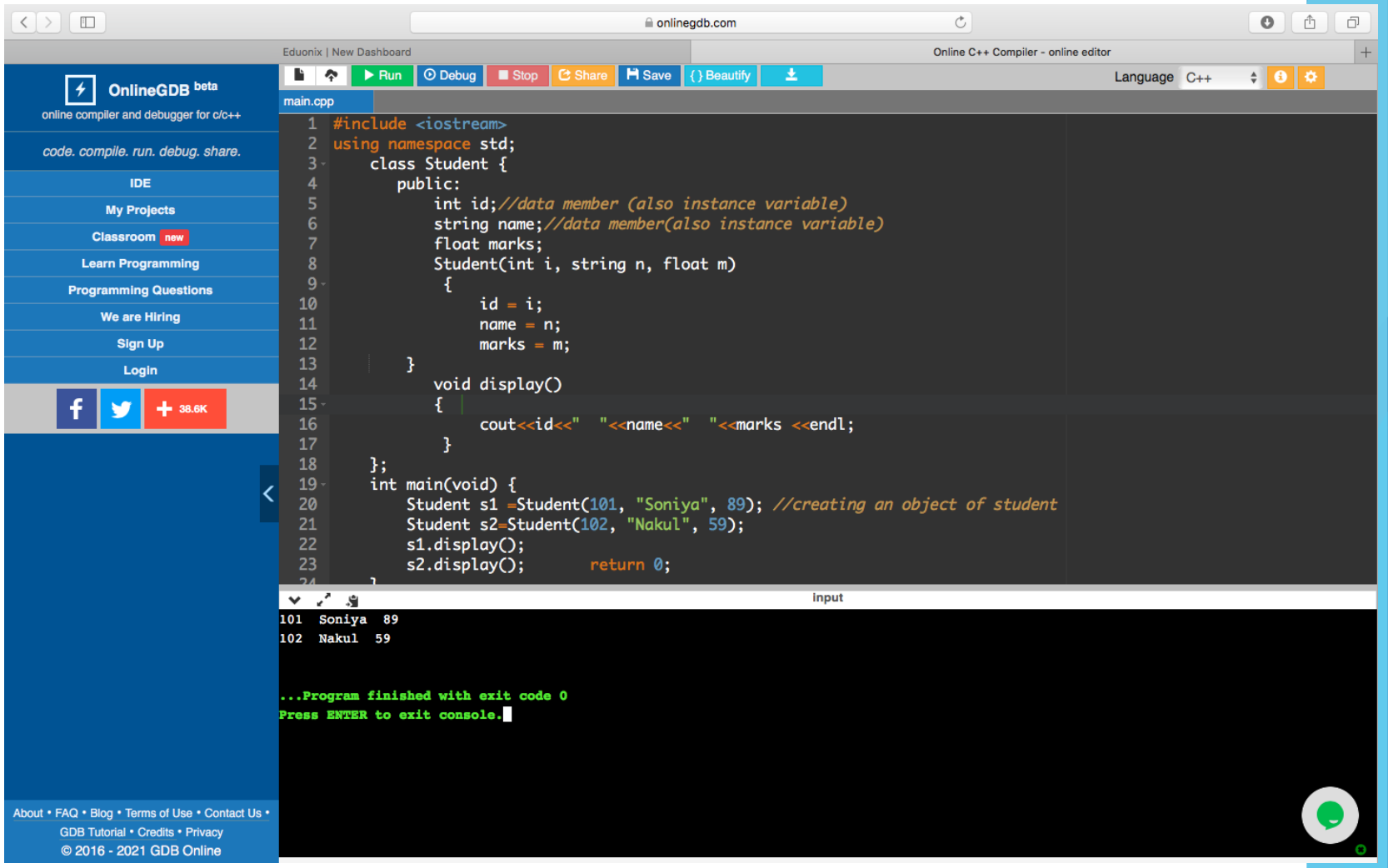



SCRATCH
SCRATCH JR
Run
Step
Debug this code.
Blocks
Assemble your blocks here:

Example Code

RGB_POT

```
// Potentiometer output connected to analog pin 3
int pot = A5;
int potVal = 0; // Variable to store the input from the potentiometer

int rLED = 11;    // Red LED,   connected to digital pin 11
int gLED = 10;    // Green LED, connected to digital pin 10
int bLED = 9;     // Blue LED,  connected to digital pin 9

// Program variables
// Variables to store the values to send to the pins
int rVal = 0;
int gVal = 0;
int bVal = 0;

void setup()
{
  // sets the pins as output
  pinMode(rLED, OUTPUT);
  pinMode(gLED, OUTPUT);
  pinMode(bLED, OUTPUT);
}

// Main program
void loop()
{
  potVal = analogRead(pot);   // read the potentiometer value at the input pin

  // Lowest third of the potentiometer's range (0-340)
  if (potVal < 341)
  {
    potVal = (potVal * 3) / 4; // Normalise to 0-255
    rVal = 256 - potVal;       // Red from full to off
    gVal = potVal;             // Green from off to full
    bVal = 1;                  // Blue off
  }
  // Middle third of potentiometer's range (341-681)
  else if (potVal < 682)
  {
    potVal = ( (potVal-341) * 3) / 4;   // Normalise to 0-255
    rVal = 1;                           // Red off
    gVal = 256 - potVal;                // Green from full to off
    bVal = potVal;                      // Blue from off to full
  }
  // Upper third of potentiometer's range (682-1023)
  else
  {
    potVal = ( (potVal-683) * 3) / 4;   // Normalise to 0-255
    rVal = potVal;                      // Red from off to full
    gVal = 1;                           // Green off
```



What are computers languages?

- Web Development: HTML, CSS, JavaScript
- Game Development: C++, C#, Python, Lua
- App Development: Swift, Objective C
- Miliary Contractor: ADA, C, C++, Java
- Insurance: C++, C#
- Operating systems: Linux, Unix
- Etc.

How can I learn how to code?

Khan Academy

C O D E

codecademy

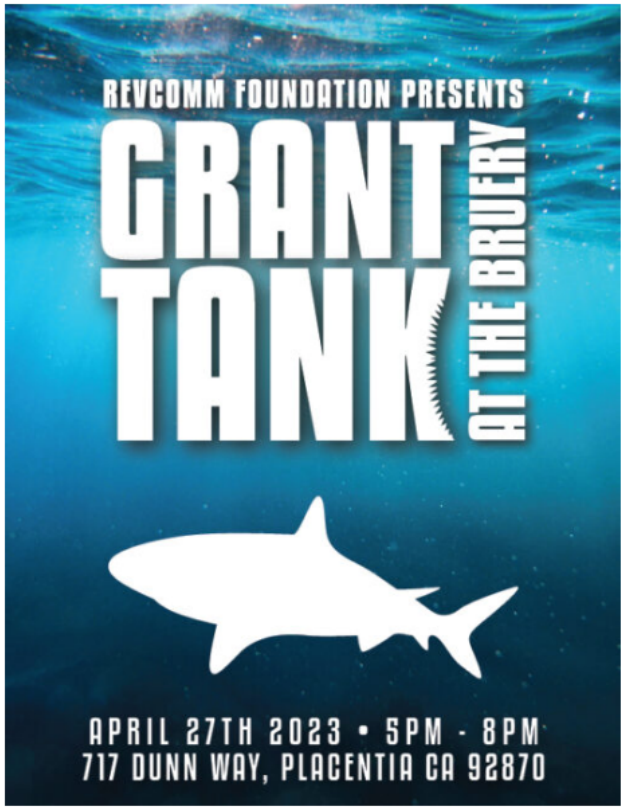
SCRATCH

revcommfoundation.org/granttank/#1659633632559-3057e2eb-6841

Join us for Grant Tank at The Bruery - Click Here to learn how you can be involved!

RevComm Foundation

ABOUT US PROGRAMS EVENTS BLOG CONTACT US DONATE



Grant Tank at The Bruery

RevComm Foundation is excited to host Grant Tank at The Bruery on Thursday April 27th from 5PM to 8PM at The Bruery's incredible outdoor tasting room – located in beautiful northern Orange County within the rich heritage of Placentia. Their amazing outdoor space provides a great atmosphere to spark conversation over delicious hand crafted beer.

Join local philanthropic investors, business leaders, entrepreneurs, and passionate community changemakers for the inaugural Grant Tank event presented by RevComm Foundation. During this fun and unconventional spin on ABC's hit show Shark Tank, RevComm Foundation will invite local nonprofit organizations to pitch their mission and vision to an audience and most importantly an assembly of generous philanthropic "Sharks". This interactive event will give nonprofit organizations a chance to secure the funding needed to further their mission.

Founders Crystal and Daniel along with the dedicated Board of Directors will provide you with an introduction of what RevComm Foundation is doing to level the playing field for nonprofit organizations. Come prepared to hear about the great work that is being done in and around your community. Enjoy an evening filled with dinner, beverages, and great conversation amongst fellow philanthropists. Most importantly of all, as an attendee of RevComm Foundation's inaugural Grant Tank event, both attendees and sharks will have the opportunity to support and fund 6 selected nonprofit organizations through an exciting "fast pitch" event.

How you can be involved...

BE A SHARK | BE A GUEST | BE A SPONSOR

Guests will be in the audience alongside Sharks to hear each agency "fast pitch" about their mission and programs. Enjoy an evening promoting a philanthropic atmosphere and join the FUNding by casting a vote for the "People's Choice Agency" who will receive 50% of ticket sales.

Tickets include a food truck dinner, snacks, and two drink tickets. Additional beverages can be enjoyed with

Elements Console Sources Network

```
<!DOCTYPE html>
<html lang="en-US" class="browser-Chrome platform-Windows js_active vc_desktop vc_transform vc_transform ">
▶ <head> … </head>
▼ <body class="page-template-default page page-id-8556 page-parent tribe-js wrapper-full-width form-style-square form-border-width-2 categories-accordion-on woodmart-ajax-shop-on offcanvas-sidebar-mobile offcanvas-sidebar-tablet notifications-sticky btns-default-flat btns-default-dark btns-default-hover-dark btns-shop-3d btns-shop-light btns-shop-hover-light btns-accent-flat btns-accent-light btns-accent-hover-light wpb-js-composer js-comp-ver-6.4.1 vc_responsive elementor-default elementor-kit-7494">
  ▶ <div id="simple-banner" class="simple-banner"> … </div>
  ▼ <div class="website-wrapper">
      <!-- HEADER -->
    ▶ <header class="whb-header whb-sticky-shadow whb-scroll-stick whb-sticky-real whb-sticky-prepared" style="padding-top: 90px;"> … </header>
      <!--END MAIN HEADER-->
    ▼ <div class="main-page-wrapper"> == $0
        <!-- MAIN CONTENT AREA -->
      ▶ <div class="container"> … </div>
```

nsive.elementor-default.elementor-kit-7494 div.website-wrapper div.main-page-wrapper

Styles Computed Layout Event Listeners DOM Breakpoints Properties Accessibility

Filter :hov .cls

```
element.style {
}
.main-page-wrapper {                                   base.min.cs…ver=5.2.0:1
  margin-top: -40px;
  padding-top: 40px;
  background-color: #FfF;
}
a, abbr, acronym, address, applet, article, aside,     base.min.cs…ver=5.2.0:1
audio, b, big, blockquote, body, canvas, caption, center, cite, code, dd, del,
details, dfn, div, dl, dt, em, embed, fieldset, figcaption, figure, footer,
```

Affects the vertical positioning of the inline boxes generated by an inline-level element inside a line box.

Learn more Don't show

```
vertical-align: baseline;
```

Console What's New ×

Highlights from the Chrome 112 update

CSS property documentation in the Styles pane

Get information about any CSS property by hovering over it in the Styles pane.

https://www.revcommfoundation.org/granttank/

What if I REALLY want to learn how to code?!!?

Python for Beginners - Learn Python in 1 Hour

11M views • 2 years ago

Programming with Mosh

#Python, #MachineLearning, #WebDevelopment Python Exercises for Beginners: https://goo.gl/1XnQB1 ⭐ My Favorite Python ...

Introduction | What You Can Do With Python | Your First Python Program | Variables | Receiving... 19 chapters

10 MUST USE Websites To Learn To Code In 2021

1.3K views • 1 year ago

Jon Vine

Learn to Code Online on Educative: https://www.educative.io/unlimited?aff=K3Y5 Today we're looking at the best 10 websites to ...

How to ACTUALLY learn to code... 7 Roadmaps for 2023

1.1M views • 3 months ago

Fireship

Explore 7 roadmaps or learning paths for beginner developers. The goal of this video is to provide a starting point for aspiring ...

4K

MOBILE DEV | DESKTOP DEV | HARDWARE | GAVE DEV | MACHINE LEARNING | LOW-LEVEL... 7 moments

BEST WEBSITES to Learn Coding for FREE!!

5.6K views • 1 year ago

BlackMatrix

Coding is a very creative process, and it allows you to make a lot of things such as websites, mobile apps, web apps, Games , and ...

Coding Bootcamps?!!?

CODING BOOTCAMP COMPARISON

GENERAL ASSEMBLY	Mobile Dev, Front-end Dev, Back-end Dev, UX Design, Web Design, etc.	$ - $$	on campus & online	8-12 weeks	Most locations worldwide
BLOC	Ruby on Rails, Front-end, UX/UI, Android/iOS Dev, etc.	$$ - $$$	online only	12-74 weeks	Largest online bootcamp
HACK REACTOR	Javascript focused curriculum and web apps	$$$$	on campus & online (beta)	12 weeks	99% of grads hired within 3 months
App Academy	Ruby, PostgreSQL, Rails, JavaScript, jQuery, HTML5/CSS3, etc.	varies (18% of first year's salary)	on campus only	12 weeks	No tuition - just a placement fee
DEV BOOT CAMP	Ruby, Javascript, SQL, HTML5/CSS3, etc.	$$$	half online, half on campus	19 weeks	Scholarships for groups under-represented in tech
CODING DOJO	LAMP, MEAN, Ruby on Rails, Python, iOS, and Front-end	$$ - $$$	on campus & online	14 weeks	Learn up to 3 dev stacks

codementor

CODING BOOTCAMP 101: THE BASICS

FINANCIAL OPTIONS

- INCOME SHARE AGREEMENTS
- APPLY FOR SCHOLARSHIPS
- APPLY FOR A LOAN
- GET HELP FROM FAMILY
- CROWD-FUNDING
- EMPLOYER SPONSORSHIPS
- THE G.I. BILL

CAREER KARMA

PART-TIME vs. FULL-TIME

PART-TIME
- Usually 34 weeks
- Good for students & those with jobs
- Nights & weekends
- More time to absorb material

FULL-TIME
- Usually 17 weeks
- Major time commitment
- Must be passionate & driven
- More intensive

IN-PERSON vs. ONLINE

IN-PERSON
- More structured approach
- Easy access to instructors
- Sense of community

ONLINE
- Must be self-motivated & organized
- More flexibility
- Less community

Average Bootcamp Costs in 2021

Collected by Best Colleges

Average Cost $13,580.00

Least Expensive $1,480.00

Most Expensive $30,000.00

129 Total Bootcamp Providers

624 Total Bootcamp Programs

Average Cost by Technical Discipline

Cybersecurity	$14,442.00
UX/UI Design	$12,436.00
Software Engineering	$15,037.00
Web Development	$12,618.00
Data Science	$15,078.00

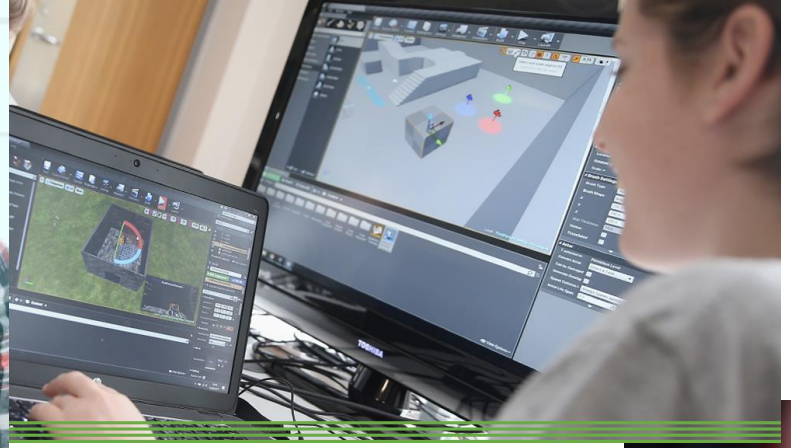
Our Methodology: The bootcamp programs used to calculate the average cost of coding bootcamps in 2021 had to meet the following criteria: the bootcamp must be located in the United States, it must be a minimum of eight weeks long, it cannot be free, and it must require 15 hours of work per week if part time or encourage 10 hours of work per week if self-paced.

By Time Commitment

Part-Time	$12,265.00
Full-Time	$14,605.00

By Learning Format

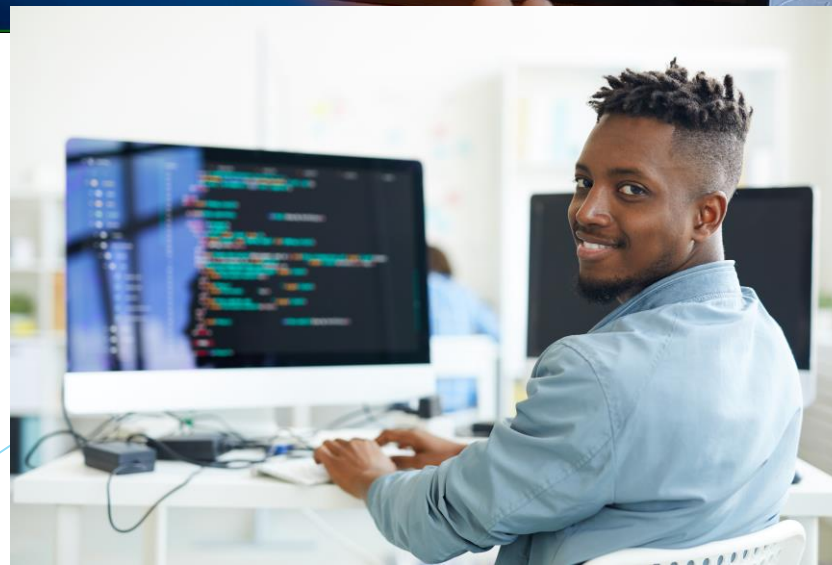
Online	$12,794.00
In Person	$13,824.00



KIDS THAT CODE

What sort of jobs are out there?

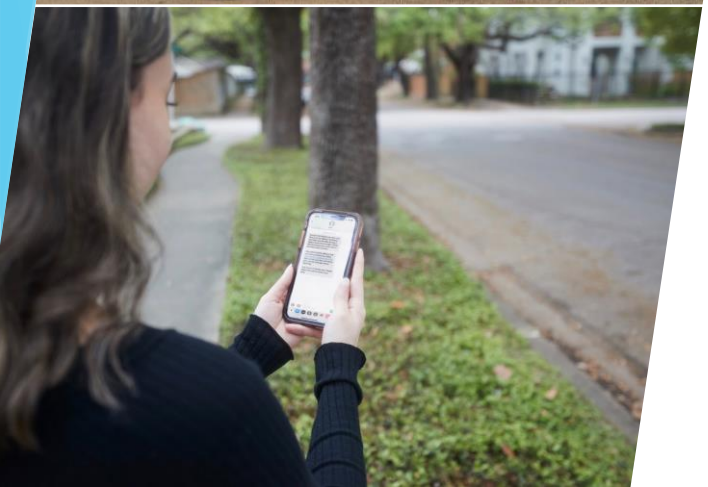
- Video game developer
- Software engineer
- App developer
- Full stack web developer
- Robotics & AI
- Cyber Security



Transportation & Logistics Careers


Automated Warehouse


750 lbs. BASE CAPACITY
DO NOT EXCEED LIMIT
2176



- Summon your pizza with an app!


Zume®
PIZZA
Mountain View, California
ABB

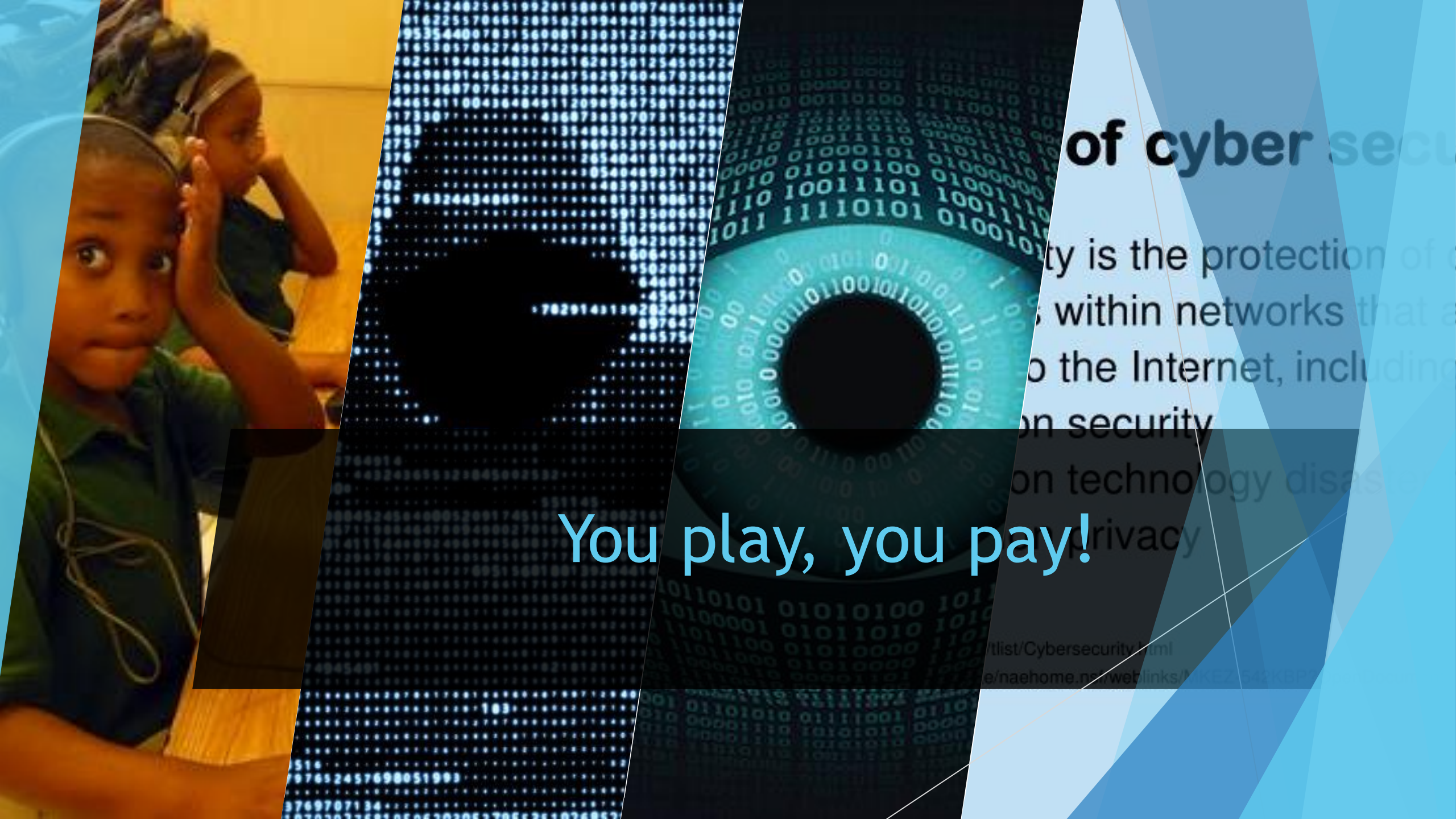

Robot Noodle Maker

The Makr Shakr

Royal Carribean Cruise Ships

The Weird Hotel - Japan


チェックアウト
English

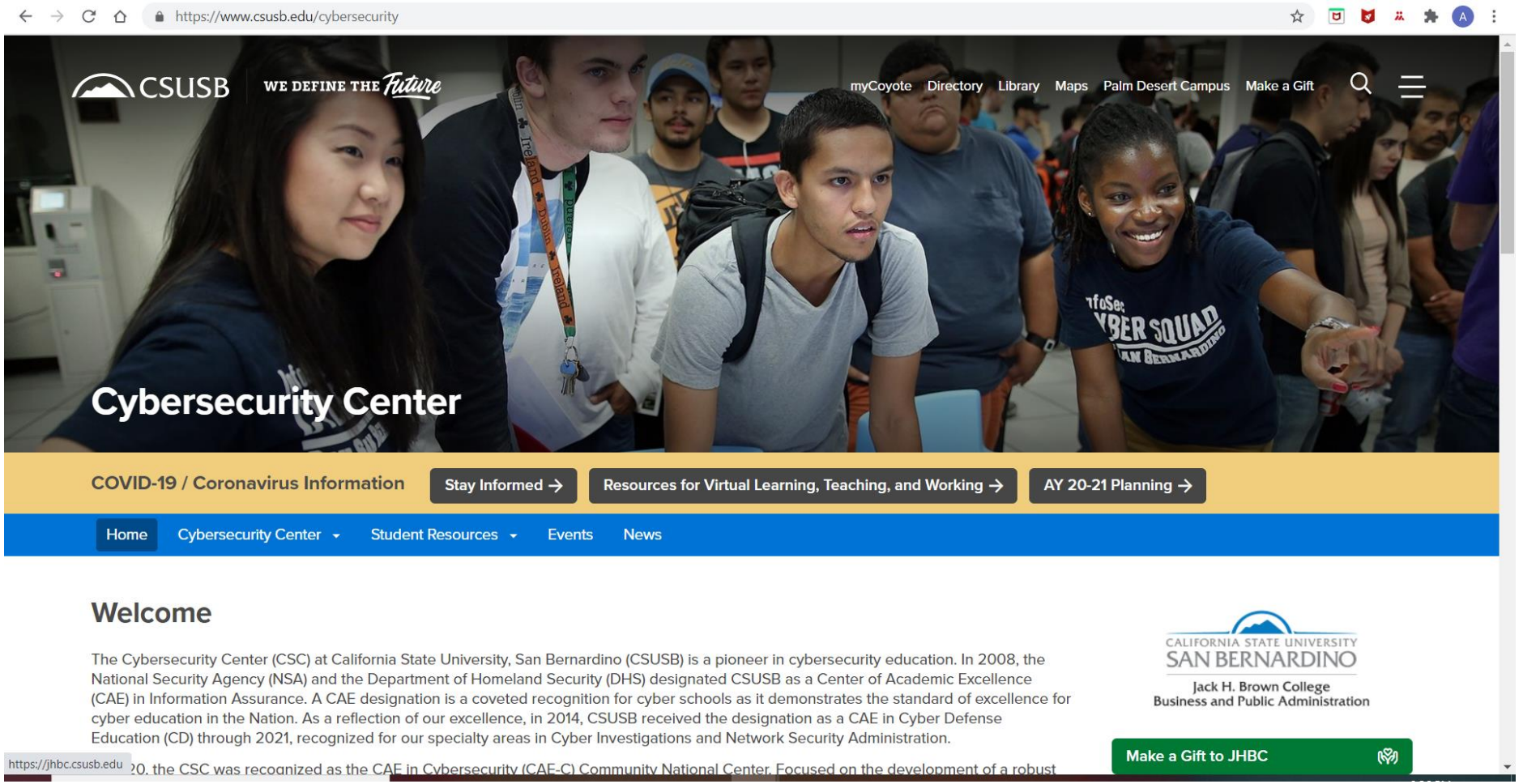


You play, you pay!


I SEE VULNERABILITIES
EVERYWHERE!!

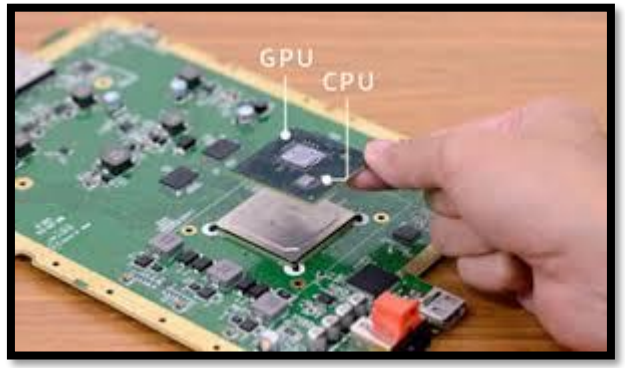

"One single vulnerability is all an attacker needs."
Window Snyder,
Chief Security Officer, Fastly


Cybersecurity
noun
the state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve this.



https://www.csusb.edu/cybersecurity

Technology saving lives




THE FUTURE
OF CODING

OpenAI Research Product Developers Safety Company Search

Introducing ChatGPT

We've trained a model called ChatGPT which interacts in a conversational way. The dialogue format makes it possible for ChatGPT to answer followup questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.

Try ChatGPT ↗ Read about ChatGPT Plus

About

OpenAI is an AI research and deployment company. Our mission is to ensure that artificial general intelligence benefits all of humanity.

Our vision for the future of AGI

Our mission is to ensure that artificial general intelligence—AI systems that are generally smarter than humans—benefits all of humanity.

Join us in shaping the future of technology

Developing safe and beneficial AI systems requires people from a wide range of disciplines and backgrounds. We're always looking for curious minds to join our team.

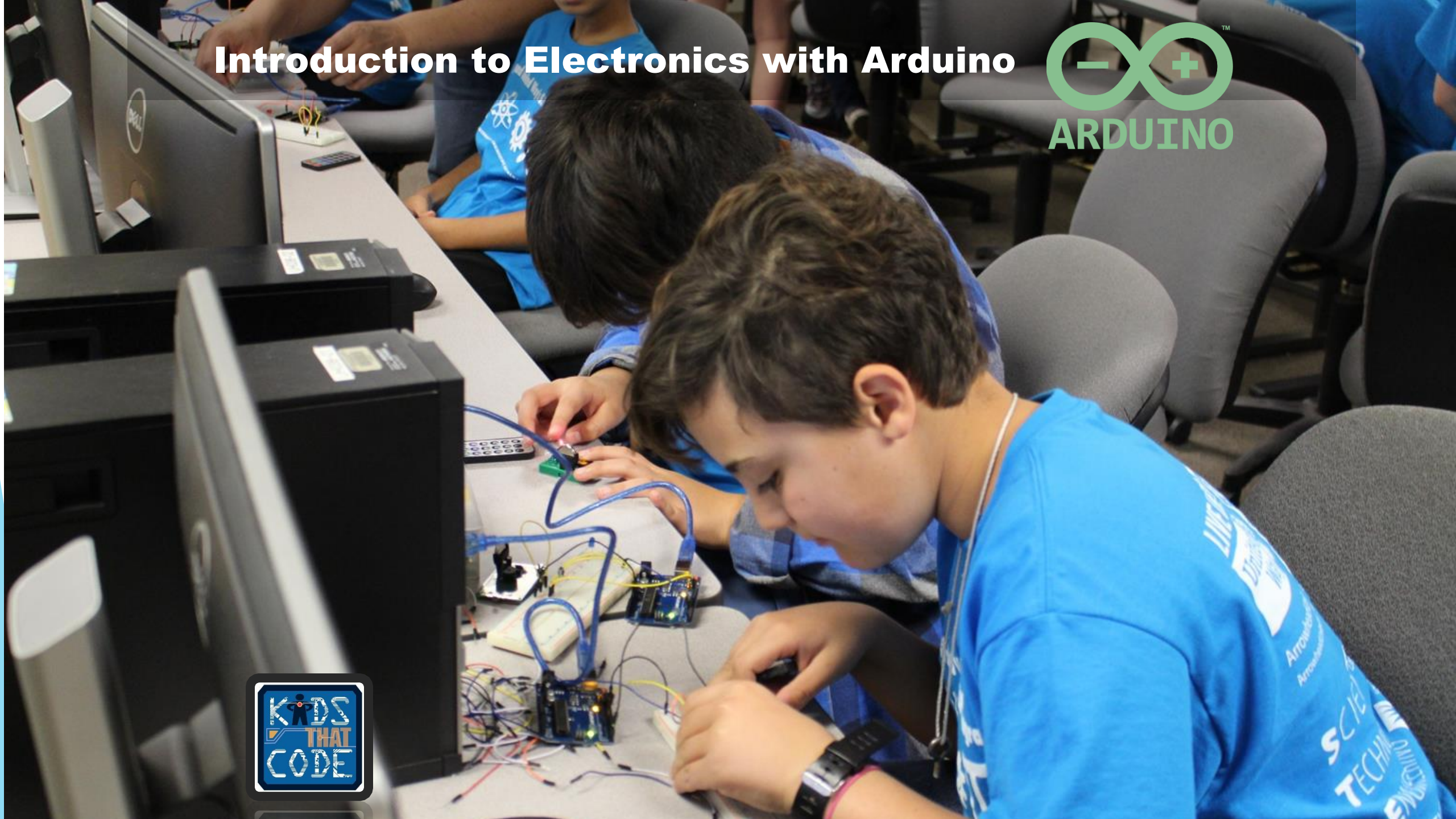
Elon Musk says he'll create 'TruthGPT' to counter AI 'bias'

By The Associated Press April 17, 2023

What is Kids That Code?


Engineering with
MINECRAFT
KIDS THAT CODE

Introduction to Electronics with Arduino



Afterschool Programs


unity

9:00 am Sunday, May 7th on CBS (Ch. 2 – Los Angeles)

The End