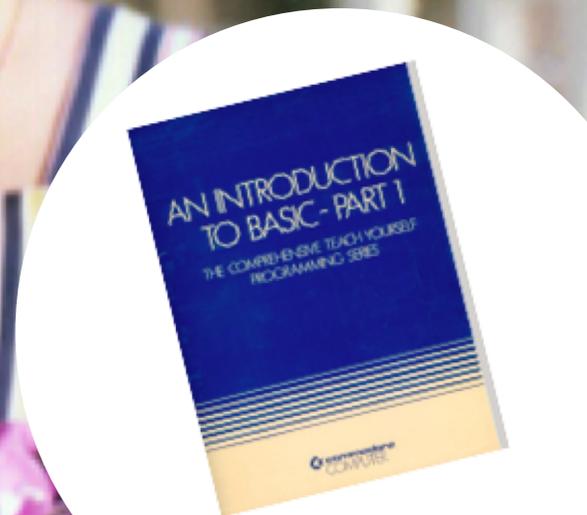
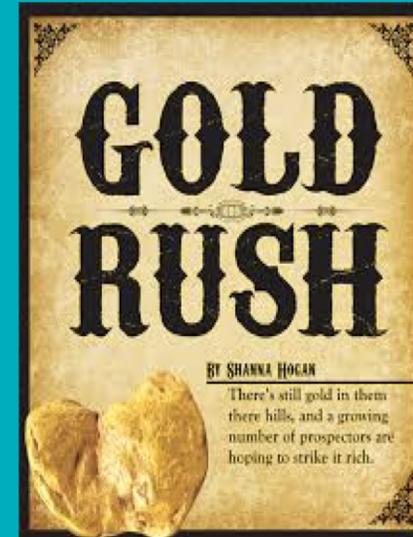


Hadi Partovi, Code.org
@hadip



The American Dream

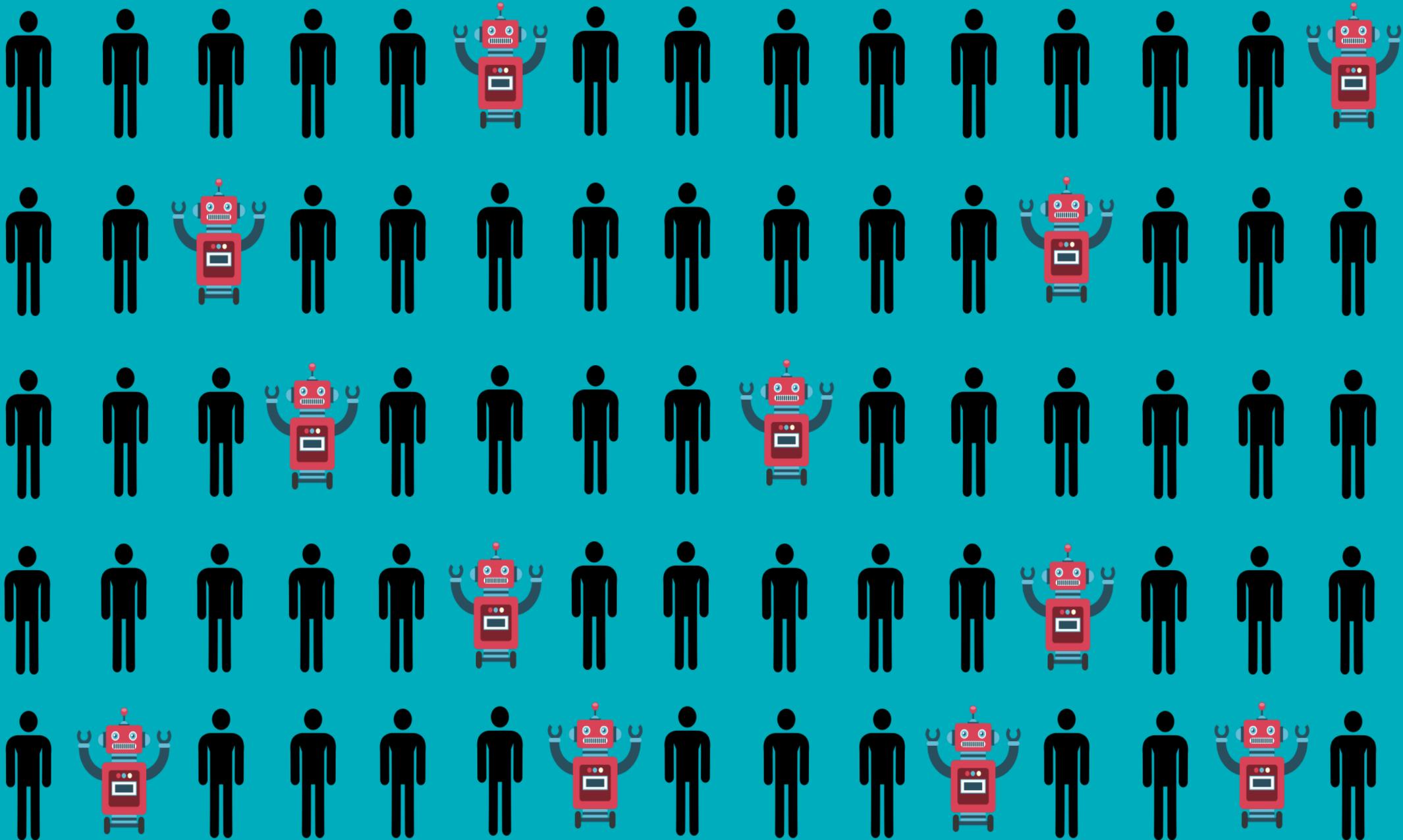


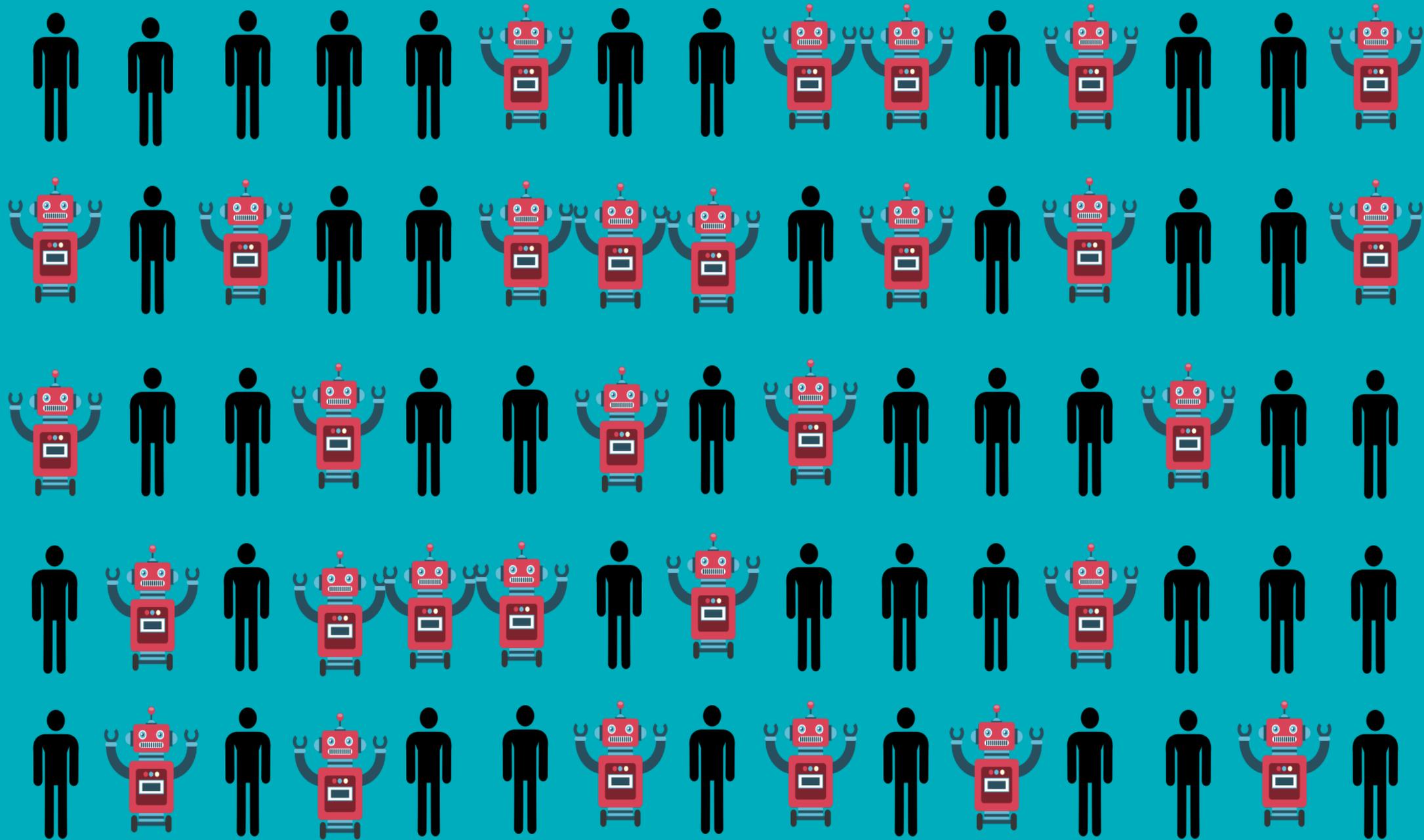


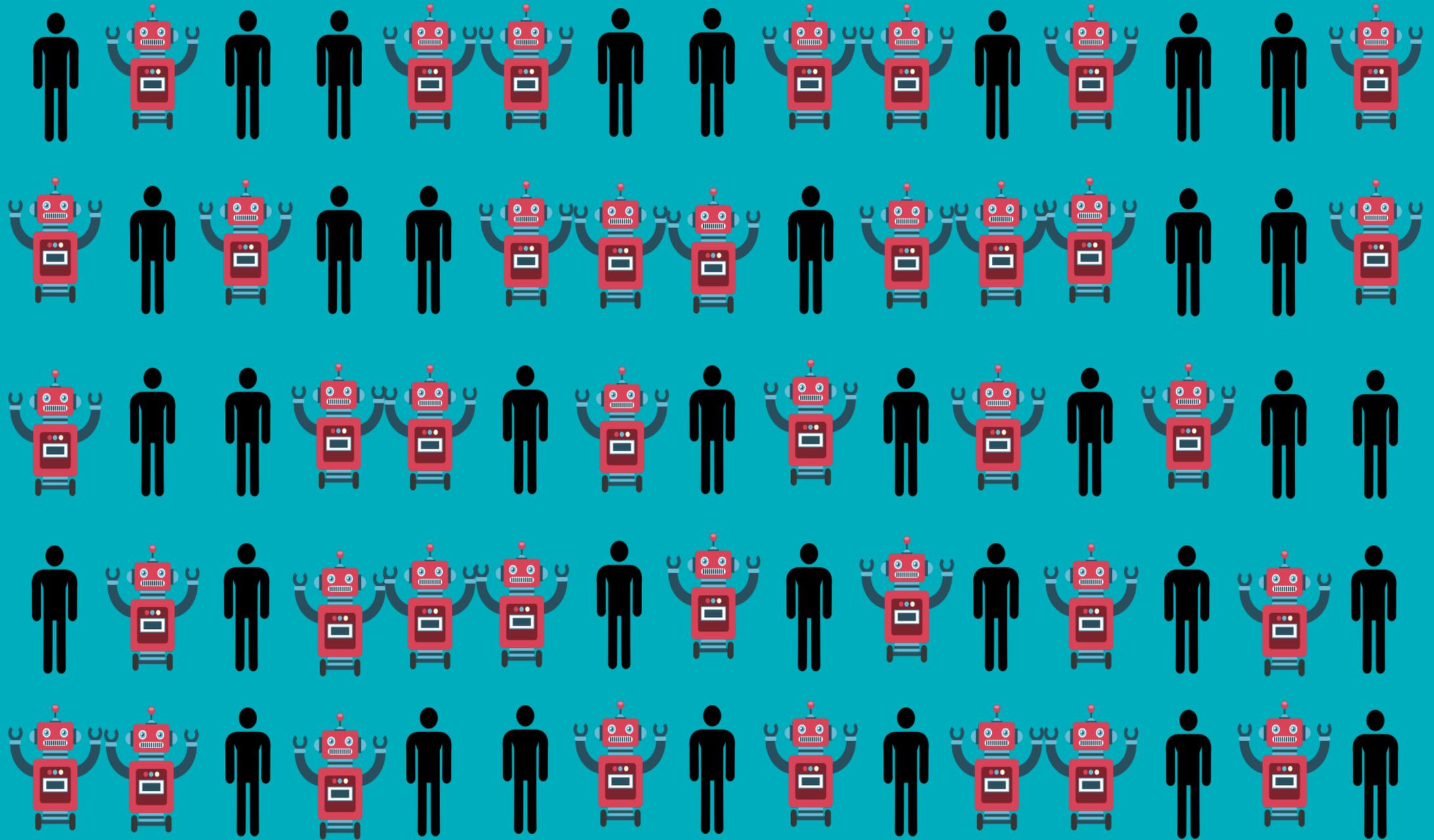


Technology's impact on our workforce













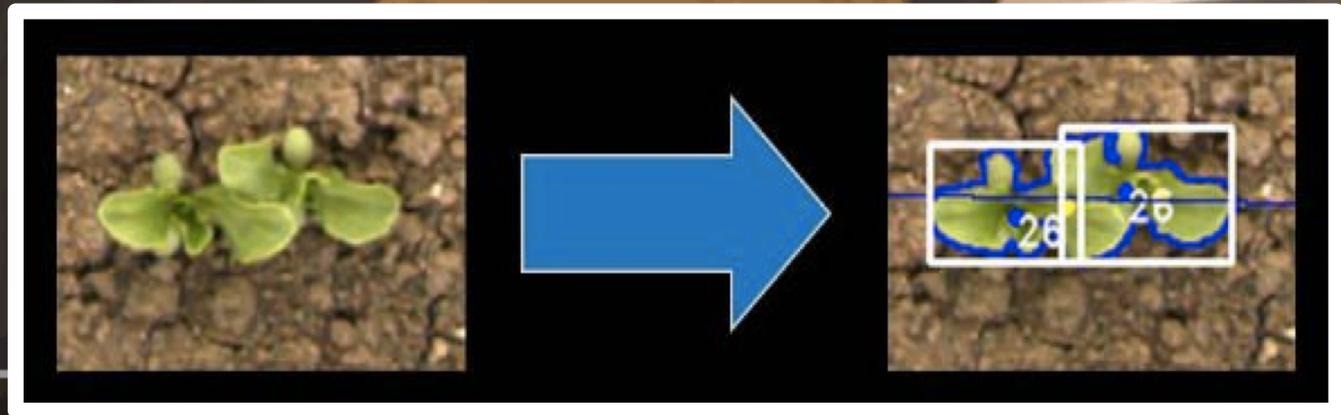






```
REMOVE HUMAN DNA

111
112 while (inputSeq.charAt(0) == " ") { //(with
113     if (inputSeq.length >2) { // if4
114         inputSeq=inputSeq.substring(1,inputSeq.length)
115     } // if4
116     else { // else4
117         if (inputSeq.length ==2) { //if5
118             inputSeq=inputSeq.charAt(1)
119         } // if5
120         else { //else5
121             inputSeq=""
122         } //else5
123     } //else4
124 } // while1
125 if (inputSeq.length >300) { //if6
126     inputSeq=inputSeq.substring(0,300)
127 } //if6
128 } //if1A
129 if (inputSeq.length <2) { //if7
130     if ((inputSeq.length==0) || (nextCRLFPos
131         inputSeq="Untitled Sequence"
132     ) //ifB
133 } //if7
134 return inputSeq
```







3M injuries, \$33B, 37,000 lives

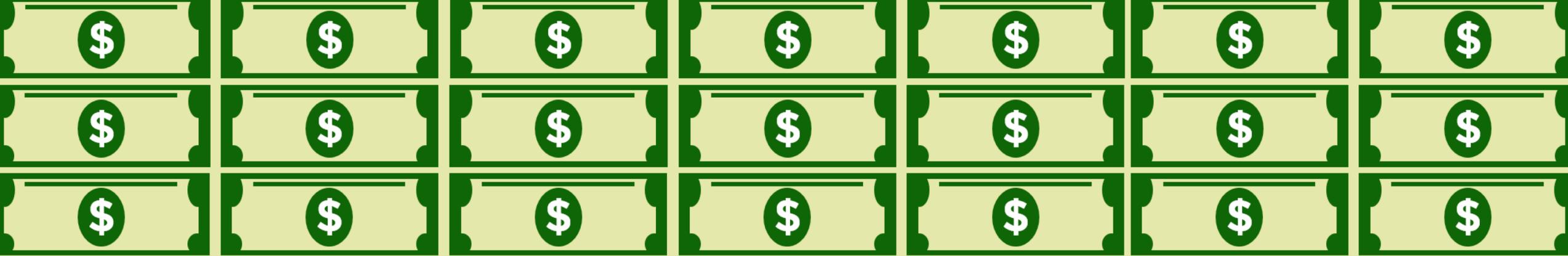


**More automation =
more productivity**





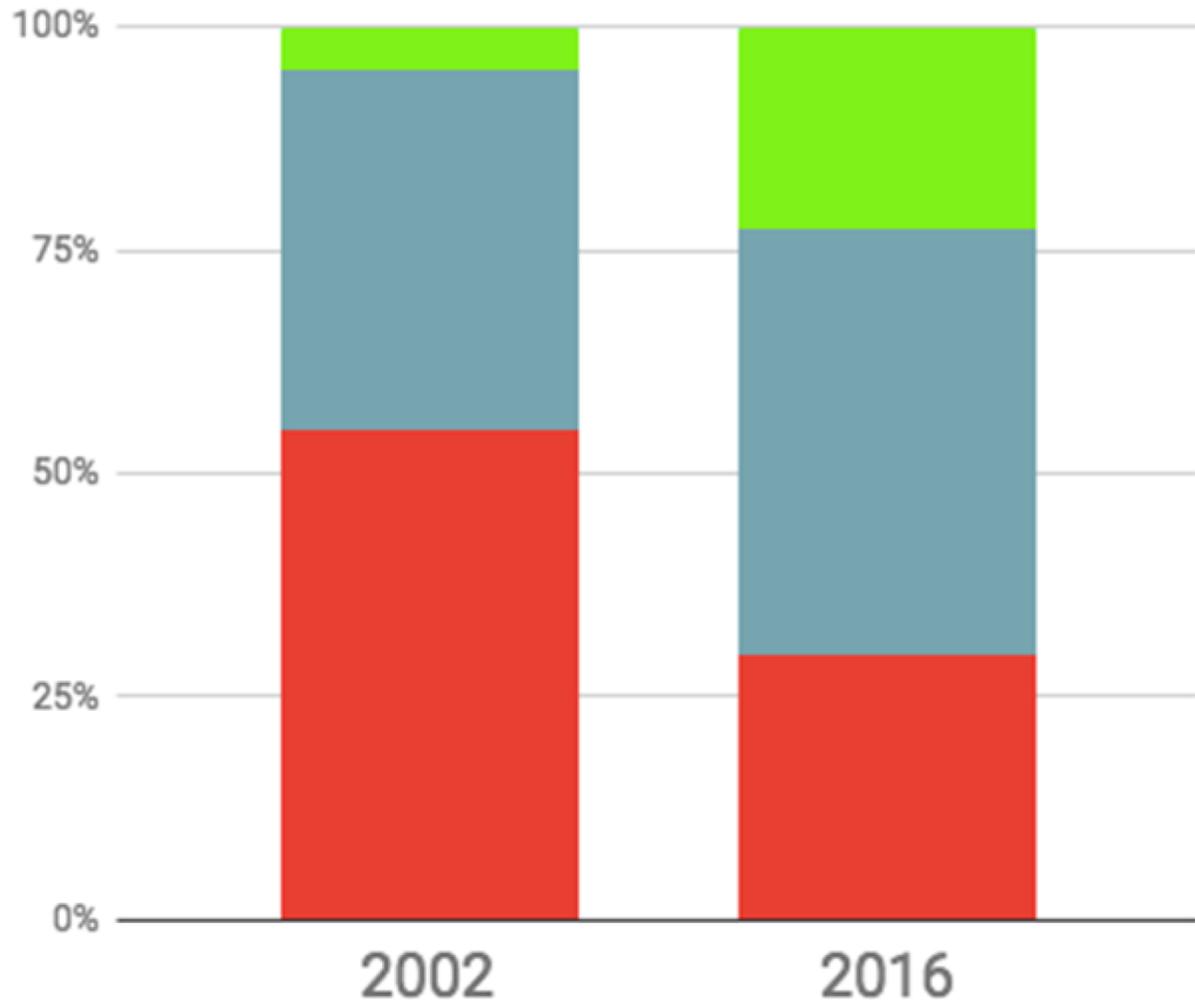




The trillion dollar question



Opportunity



“Highly digital” jobs

Average salary: \$70,000

“Moderately digital” jobs

Average salary: \$48,000

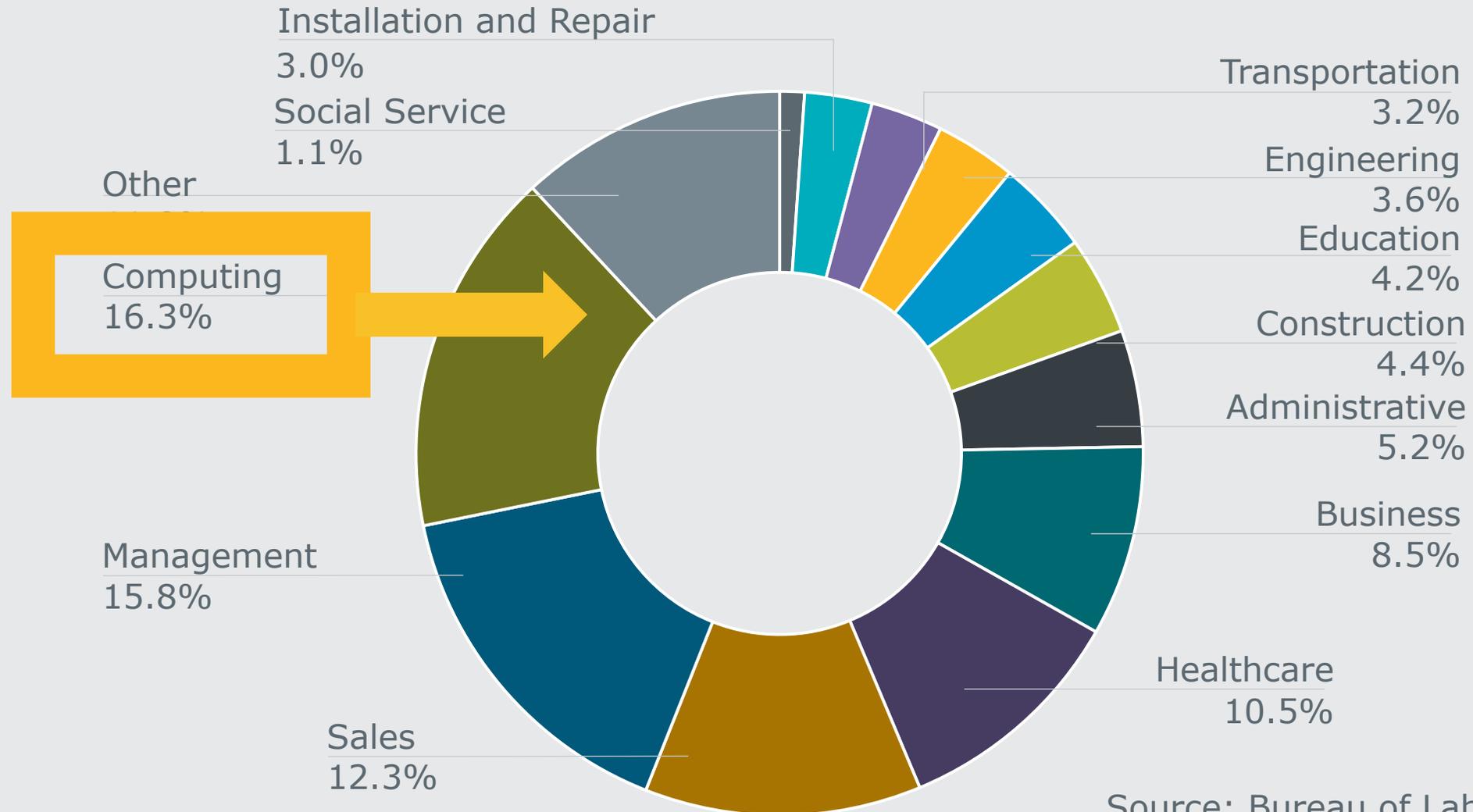
“Non-digital” jobs

Average salary: \$30,000

Source: Brookings Institute

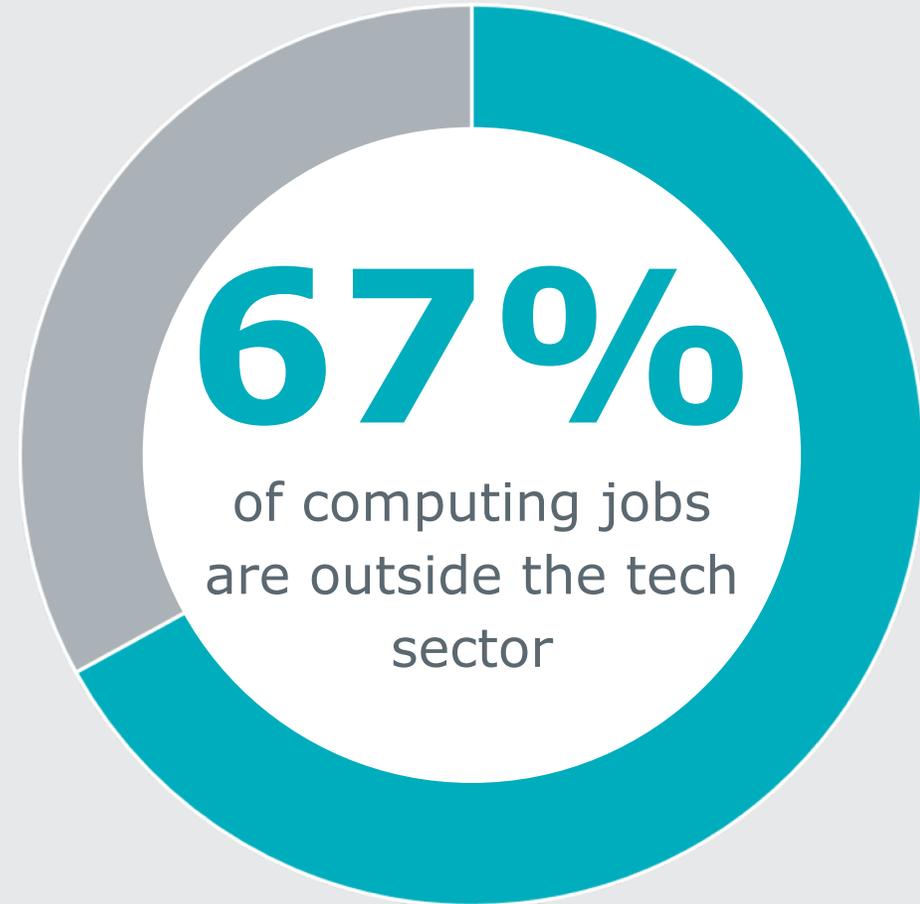
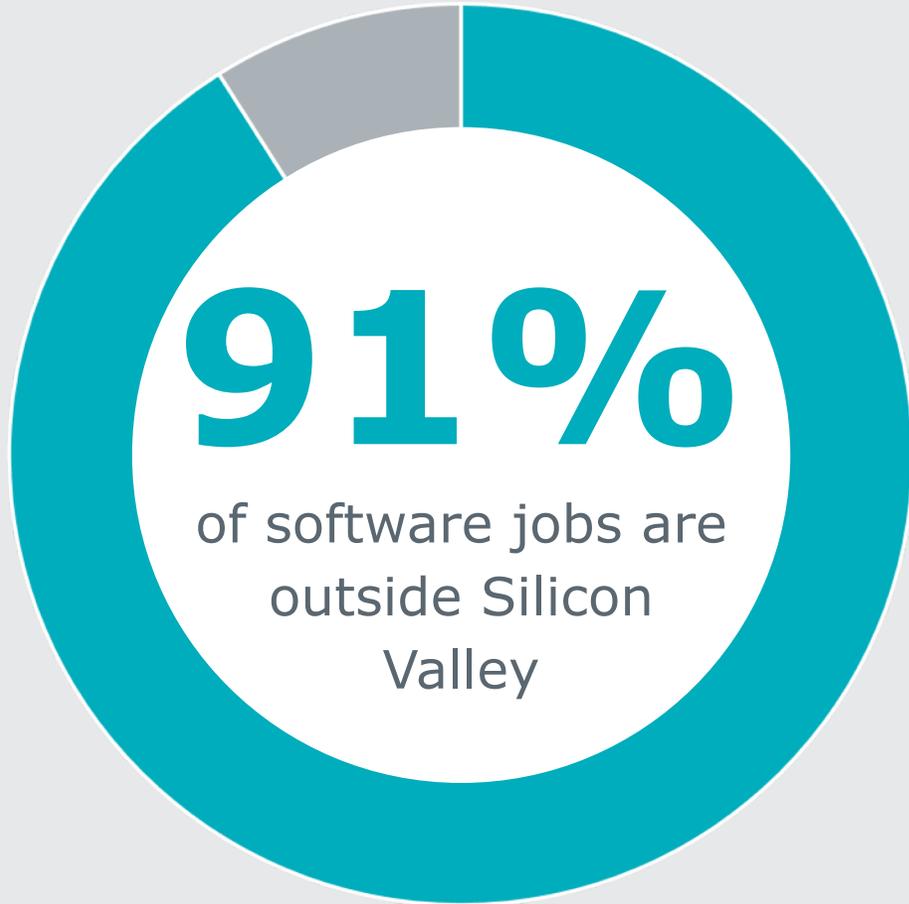


Breakdown of new wages in the U.S.

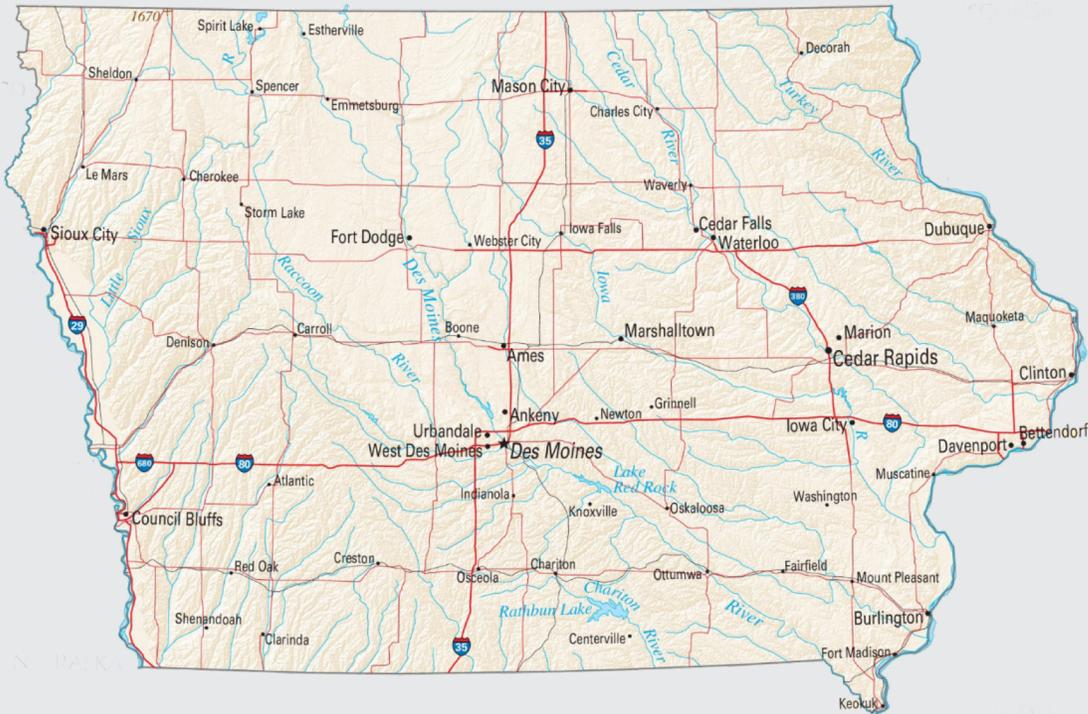


Source: Bureau of Labor Statistics

Opportunity



Iowa



4,363 open jobs

\$344 million

364 CS grads

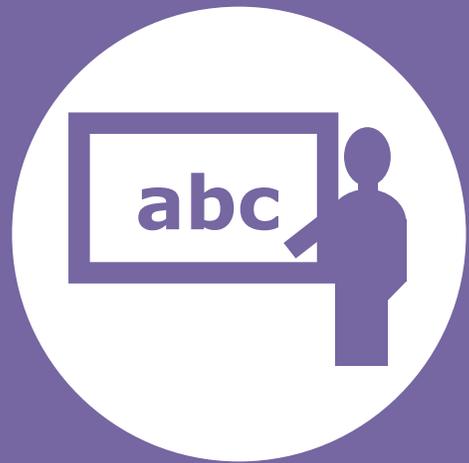
340 AP CS

31 schools



What's the role of education in all this?

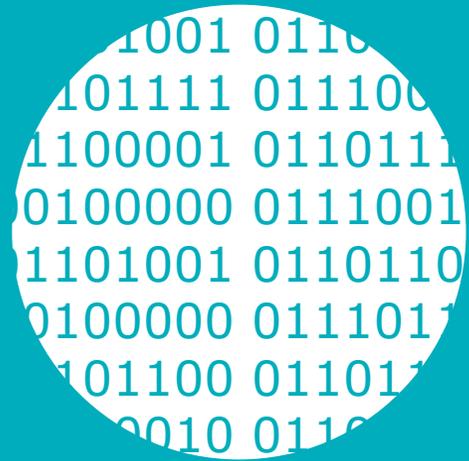




How we teach



~~How we teach~~
What we teach



Coding

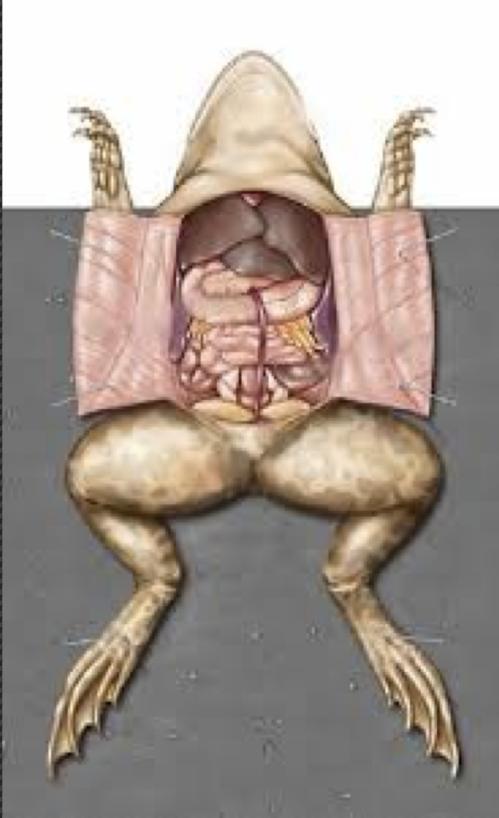


Coding Computer science

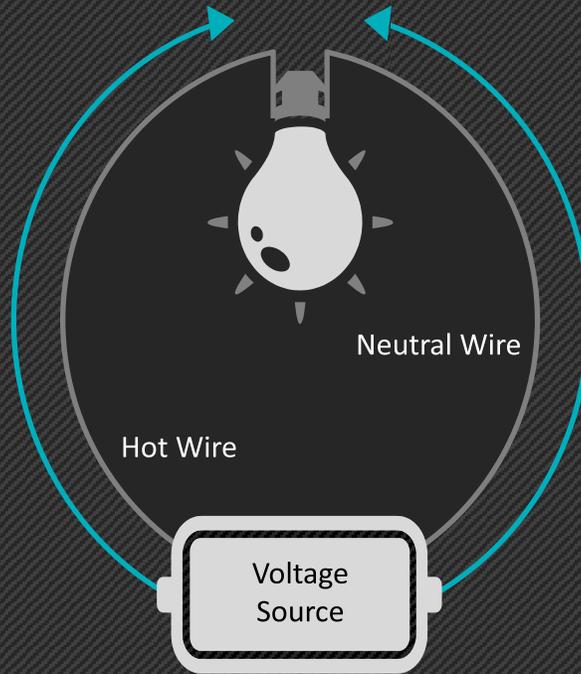


Computer science

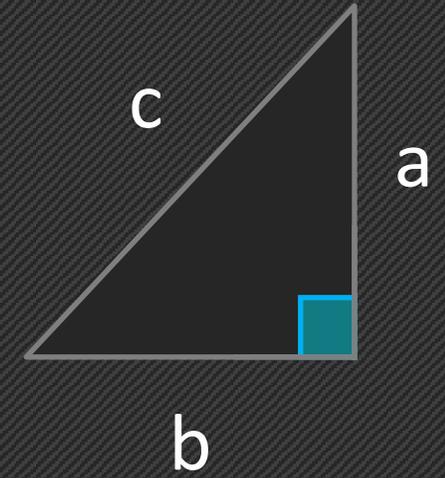
Computer programming,
Computational thinking,
Data science,
Networking,
Cybersecurity,
Robotics, and
Machine learning

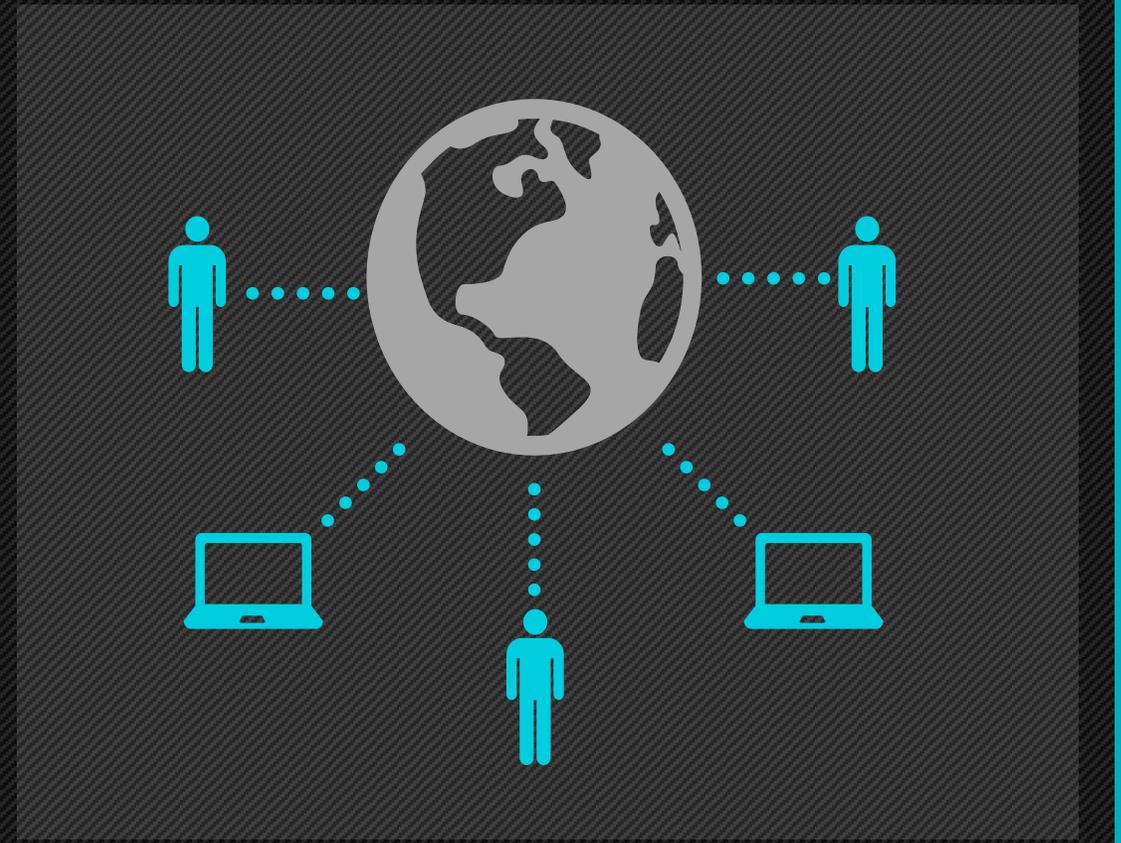
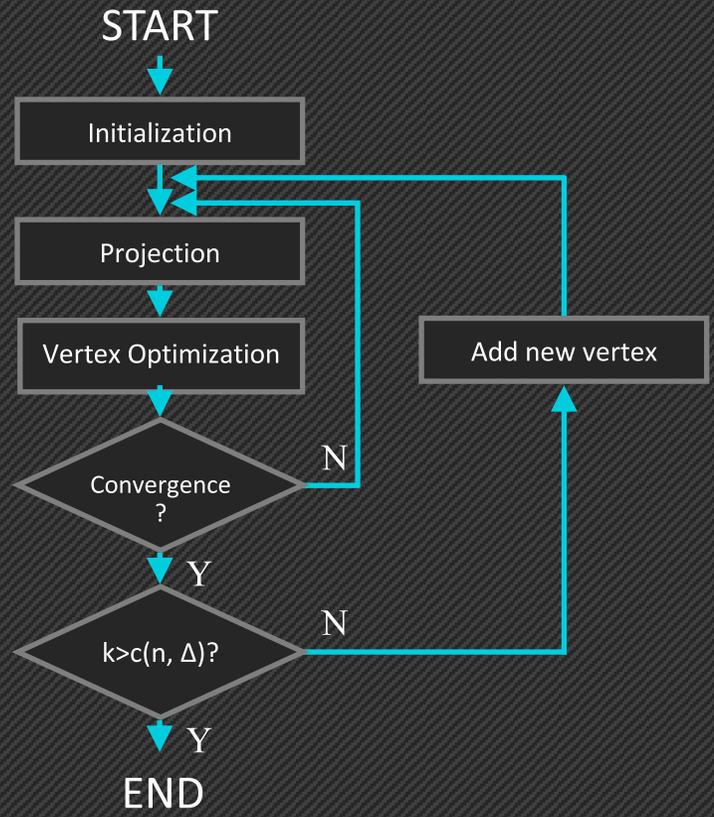


A Basic Circuit



$$a^2 + b^2 = c^2$$





In a world of accelerating technological change, the most important skill will be

the ability to learn new technology.



Opportunity in a time of automation



Diversity of the tech workforce





Opportunity in a time of automation



Diversity of the **future** workforce





**K-12
computer
science**



**University
computer
science**



**Software
workforce**

OUR VISION



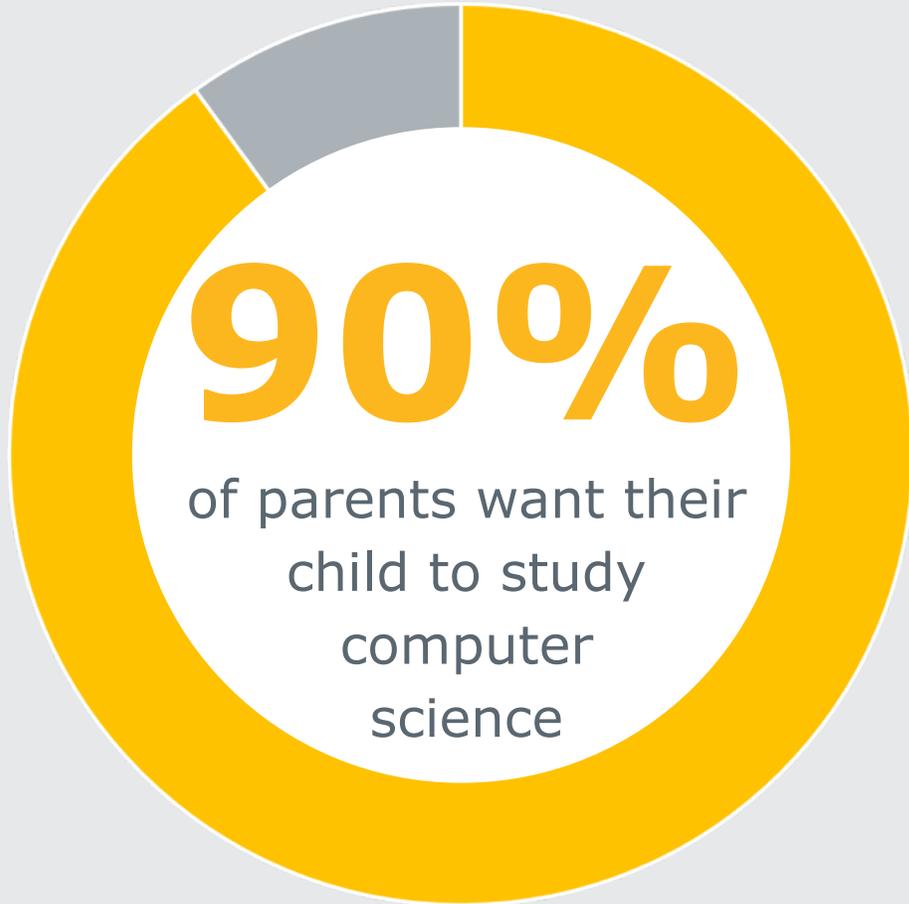
every student
in every school
has the opportunity
to learn computer science

C

O

D

E



Students rank CS their favorite subject behind only the arts.



**But most schools don't
teach CS.**

A photograph of four diverse students walking in a school hallway. The image is overlaid with a blue tint. The text "How can we change the global education system?" is written in large, white, bold letters across the center of the image. The students are dressed in casual attire, including hoodies and jackets, and some are carrying laptops. The hallway has lockers on the left and a glass-walled area on the right.

**How can we change the
global education system?**

1

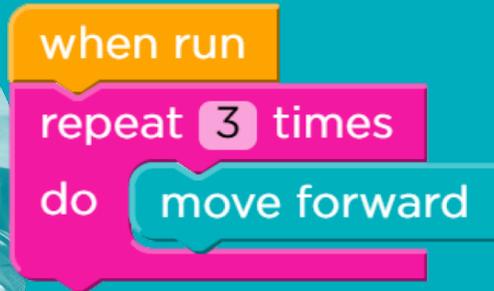
Curriculum and workshops for the teachers in our schools



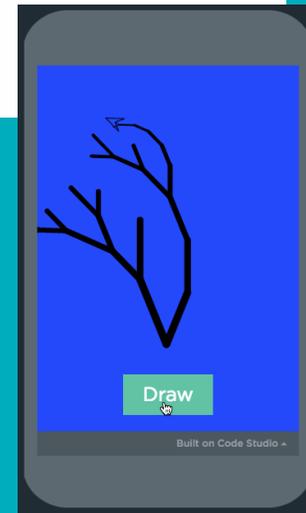
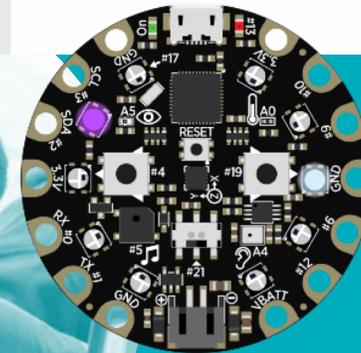
2

A platform to make learning accessible

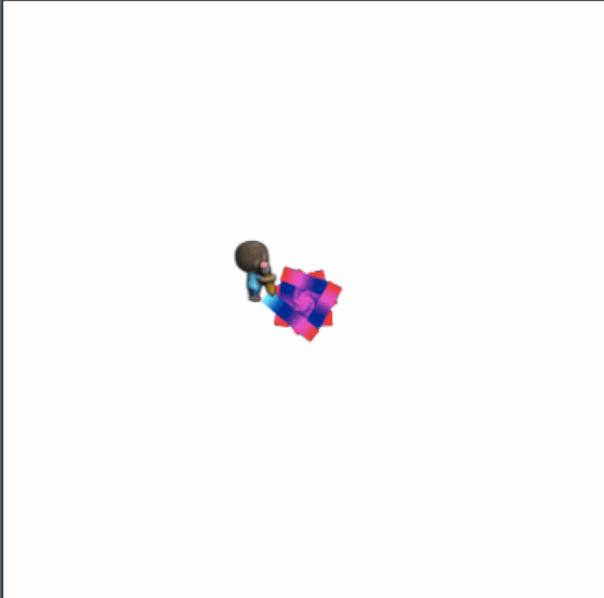
From elementary school...



```
Workspace: [Version History] [Show Text]
1 onEvent ("button1", "click", function (event) {
2   var x = getText ("text_input1");
3   for (var i = 0; i < x; i++) {
4     moveForward (25);
5     turnRight (360/x);
6   }
7 }
8
```



...to AP Computer Science



 Reset



How It Works

Built on Code Studio 

Score: 7  LivesRemain: 2



Built on Code Studio 

Up

Circles 

Left

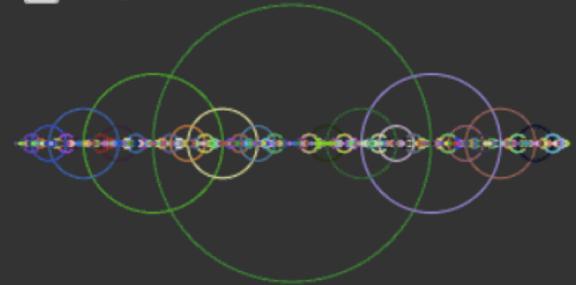
Generate Fractal 

Size 

Right

Down

Grayscale



Menu

Built on Code Studio 



3

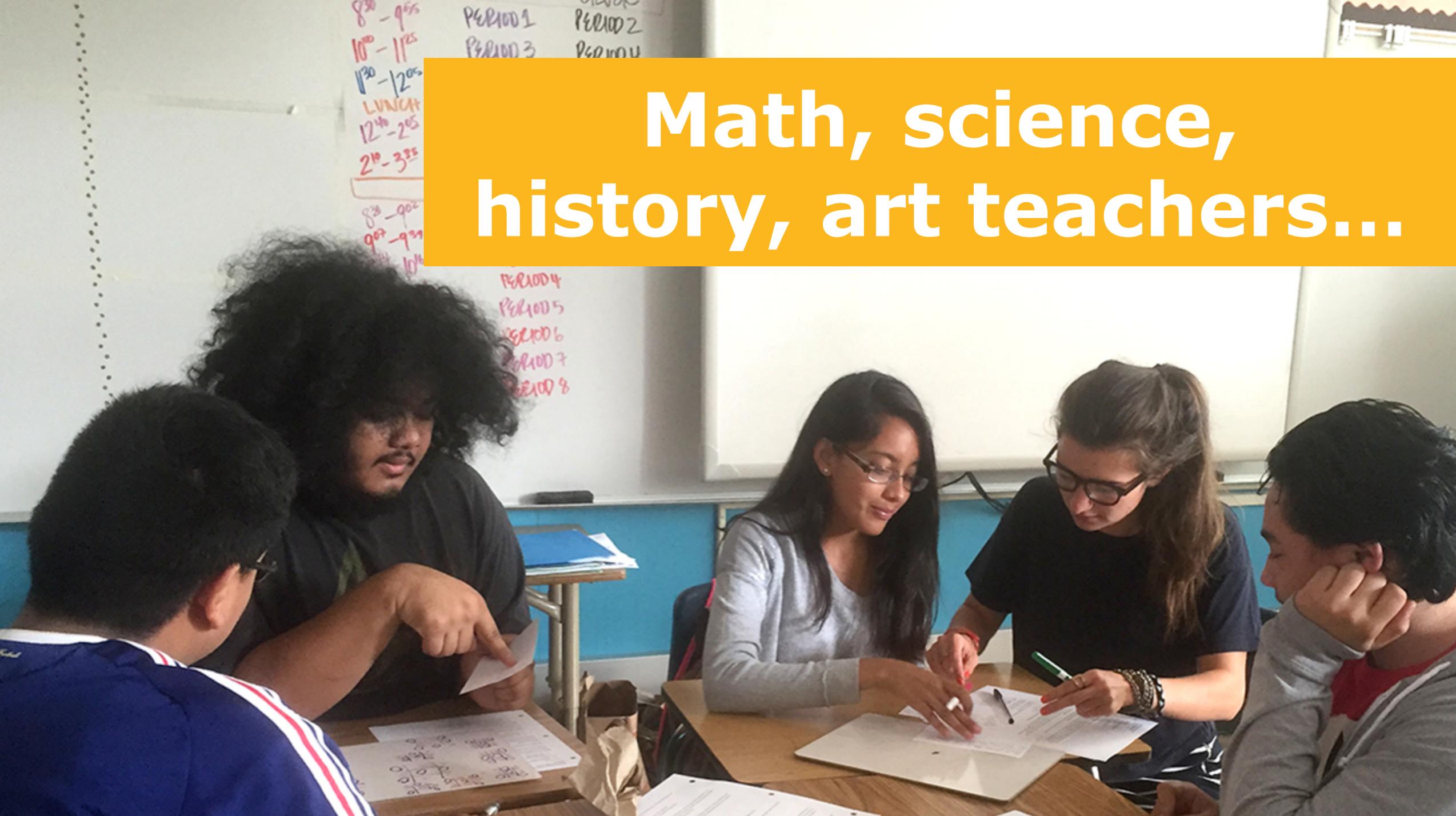
Change district, state, and federal policies

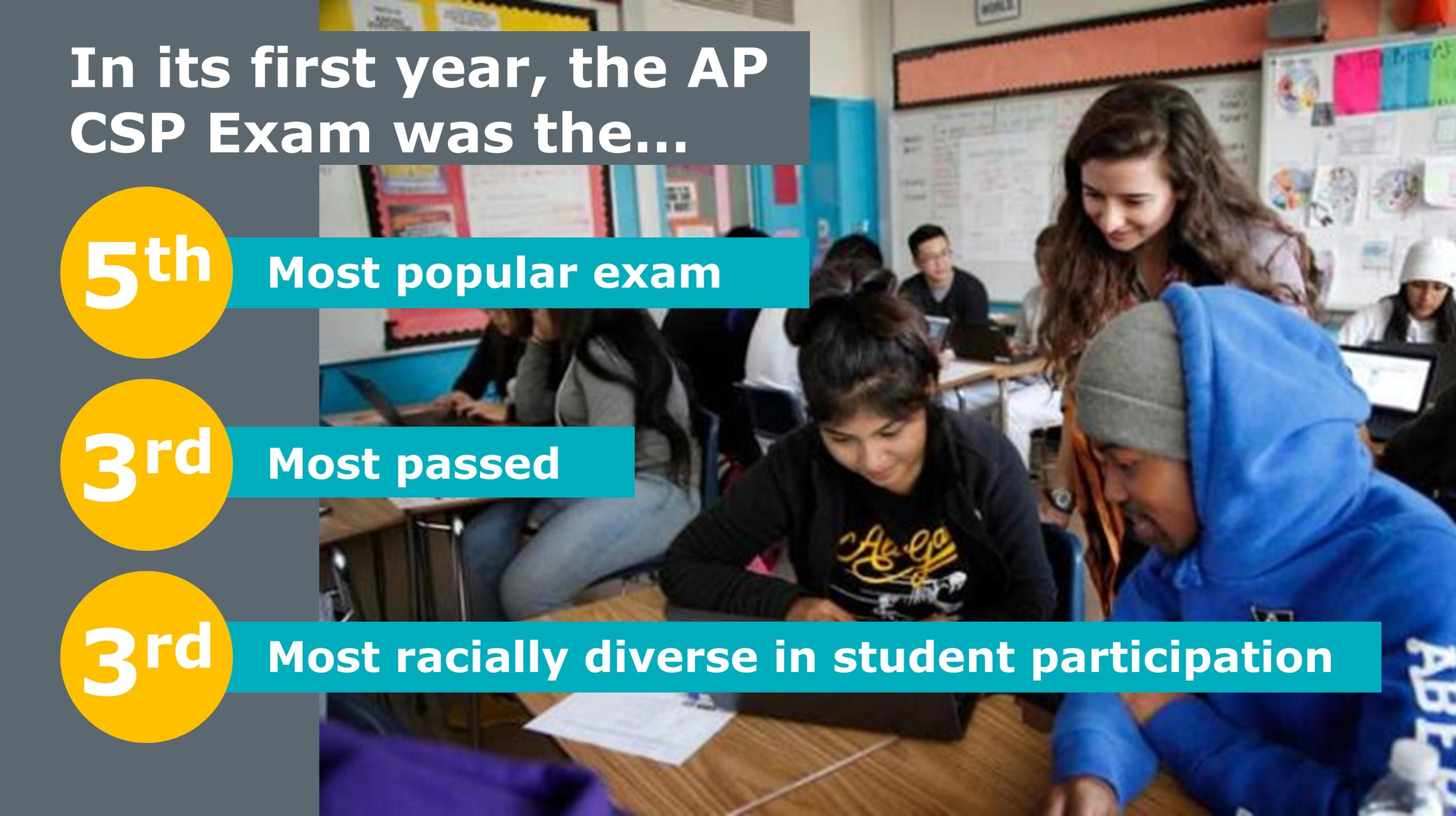


A woman with long, curly hair is writing on a whiteboard in a classroom. She is wearing a grey long-sleeved shirt and a black and orange striped scarf. She is holding a red marker in her right hand and pointing with her left hand. The whiteboard has some text and diagrams on it. The background is a classroom with blue lockers and a yellow wall.

Oakland Unified School District

Math, science, history, art teachers...





**In its first year, the AP
CSP Exam was the...**

5th

Most popular exam

3rd

Most passed

3rd

Most racially diverse in student participation

**This isn't just
Oakland...**

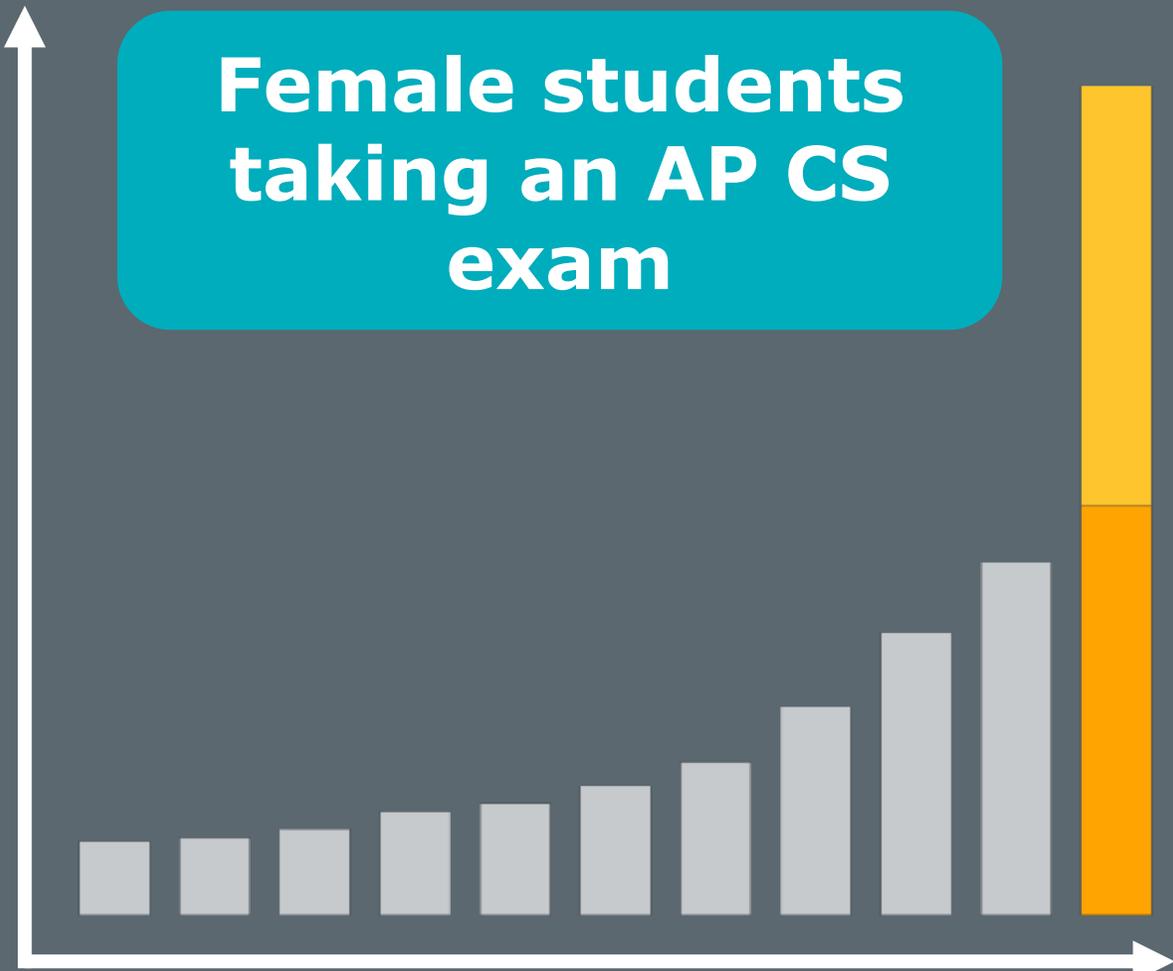
This story is nationwide.



The most bipartisan, fastest-growing movement in education



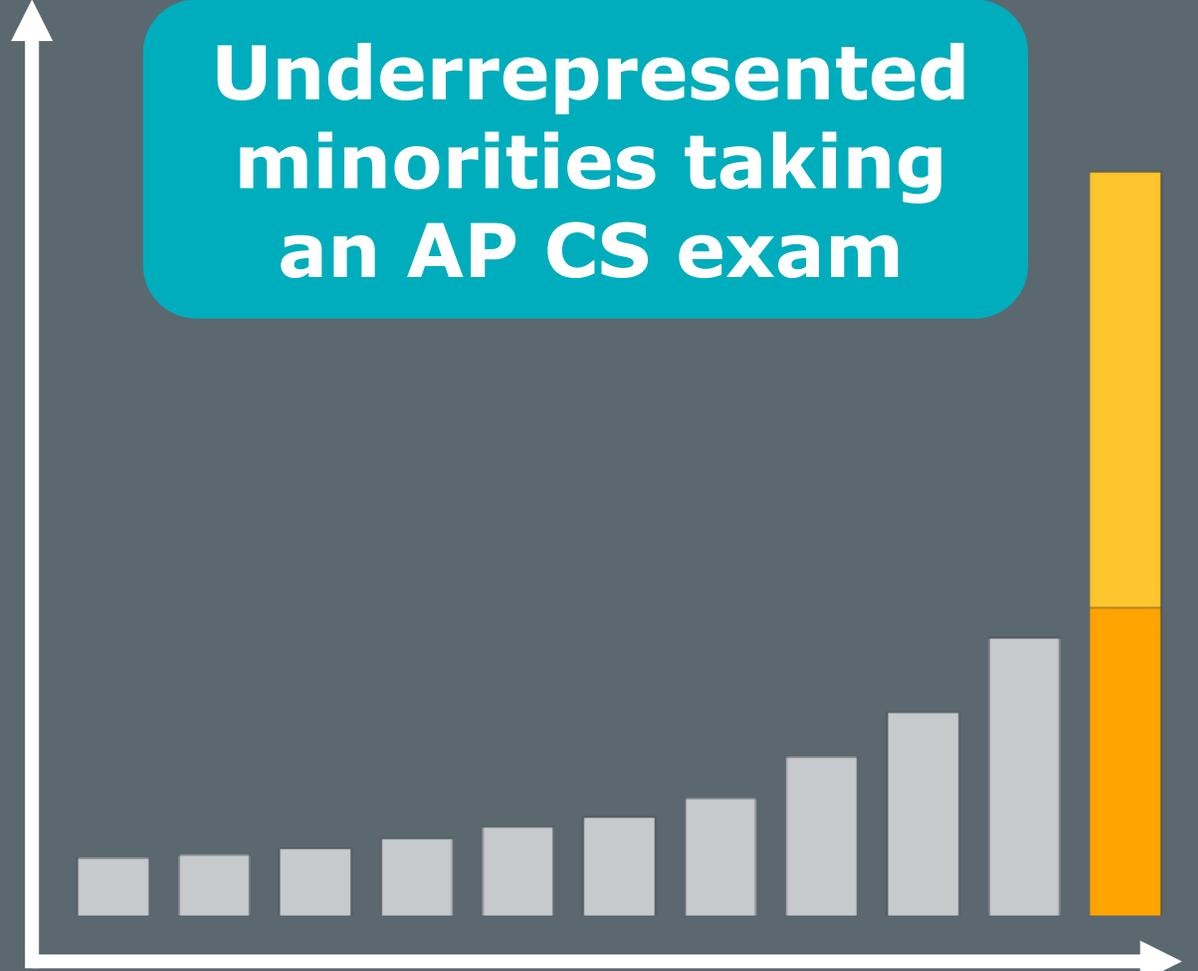
**Female students
taking an AP CS
exam**



2007

2017

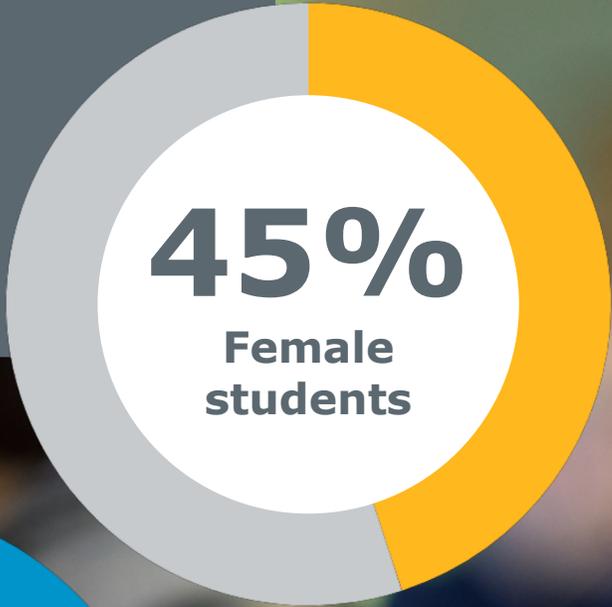
**Underrepresented
minorities taking
an AP CS exam**



2007

2017

Over 27 million students on Code.org



45%
Female students

A donut chart with a white center and a grey outer ring. The top-right portion of the ring is colored orange, representing 45% of the total.



48%
Under-represented minorities

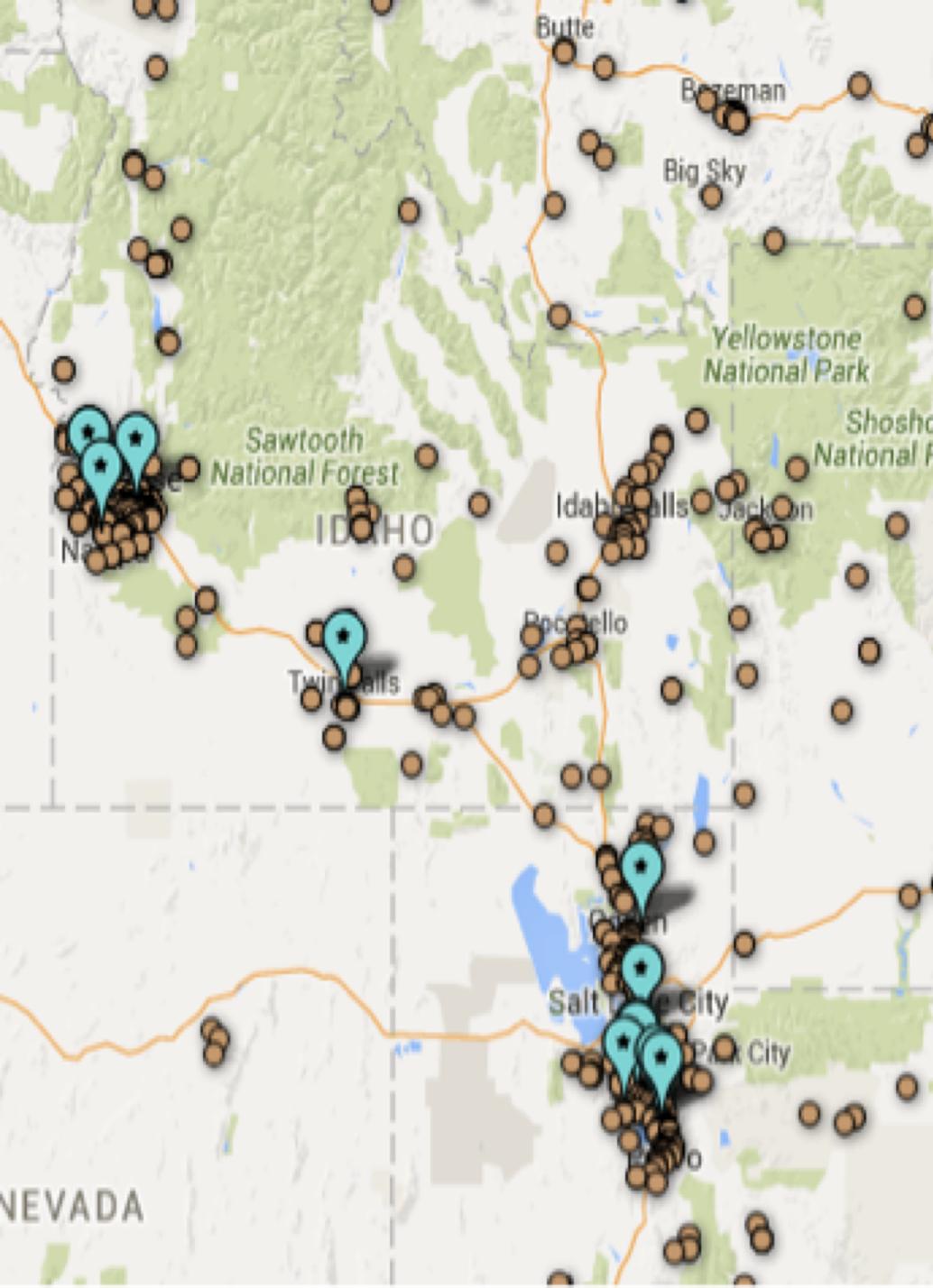
A donut chart with a white center and a grey outer ring. The right and bottom portions of the ring are colored lime green, representing 48% of the total.



49%
Students on free and reduced meals

A donut chart with a white center and a grey outer ring. The right and bottom portions of the ring are colored blue, representing 49% of the total.



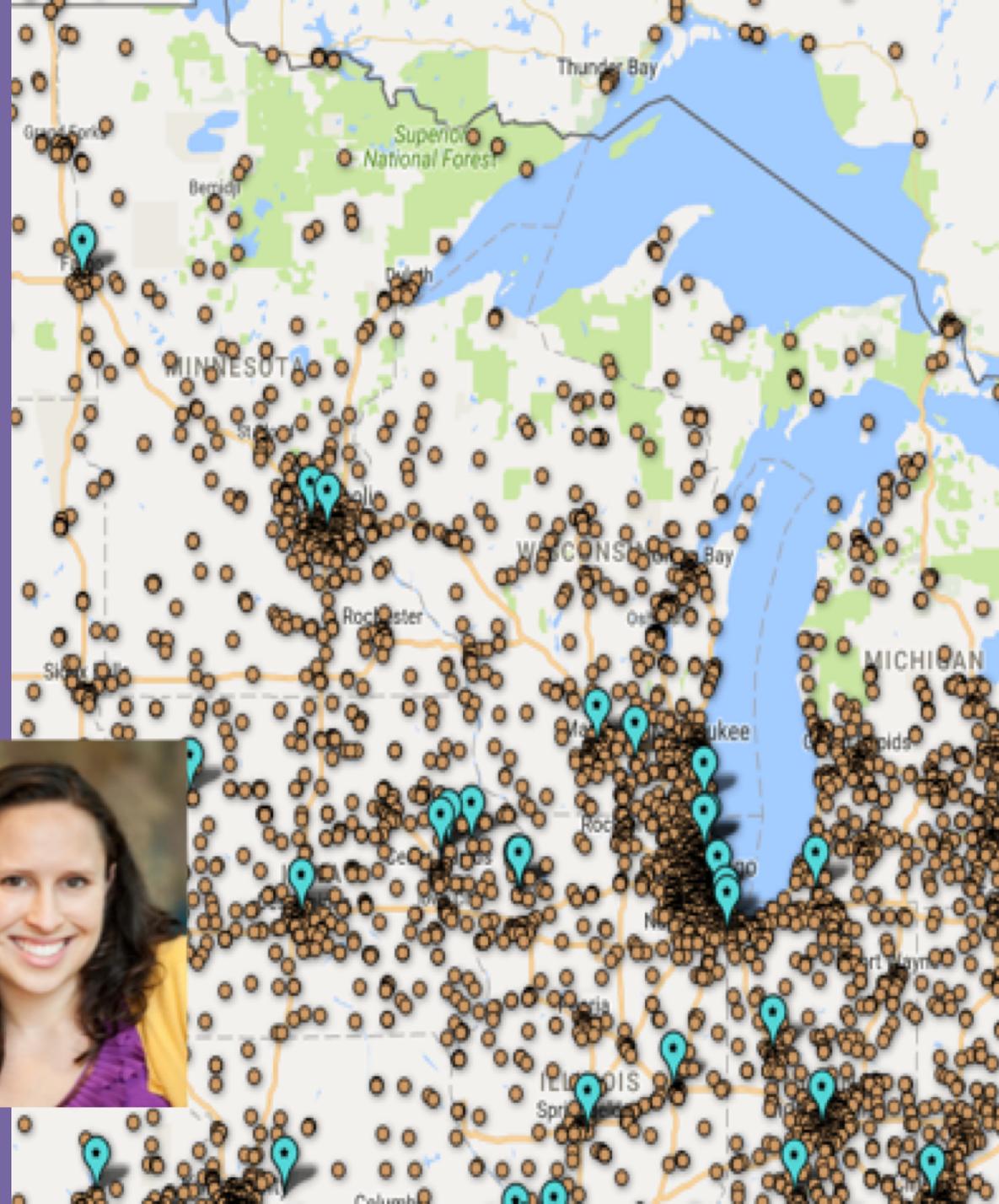


“I loved it, purely and wholly. It was fun to do, I want to just do that over and over again because I really enjoyed what I could do with it. I enjoyed its interactivity and how it felt to control what happened, it felt really satisfying to me. **I wish we could do it every day.**”

Middle school student
Nampa, Idaho

“Today’s project was a slam dunk for students. Students came in right away and started talking about the project before the bell ever rang. In fact, when I tried to ‘start’ the class – most of the students that I was trying to quiet were actually talking about the project.”

Kaitie O’Bryan
Mounds View High School
Minnesota





70%

of our AP CS
students
want to study
computer
science after
graduation.



**But most schools still
don't teach CS.**

Join the movement

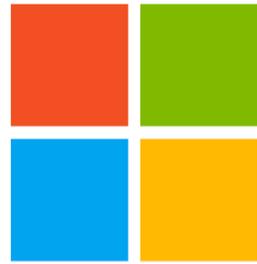
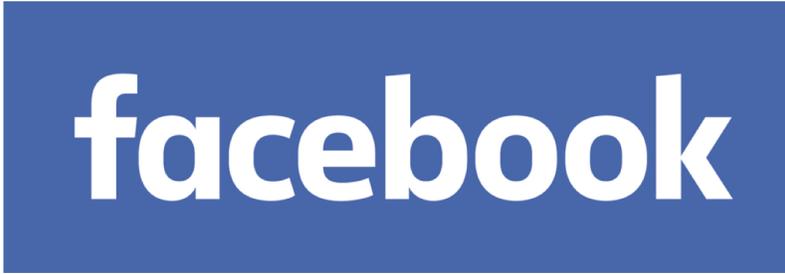
[Code.org/teach](https://code.org/teach)
[Code.org/help](https://code.org/help)



**Thank you to the 800,000
teachers on Code.org.
You're changing the face of computer science.**



Thank you to the generous donors who support us



Microsoft

BILL & MELINDA
GATES *foundation*



ON
OMIDYAR NETWORK™

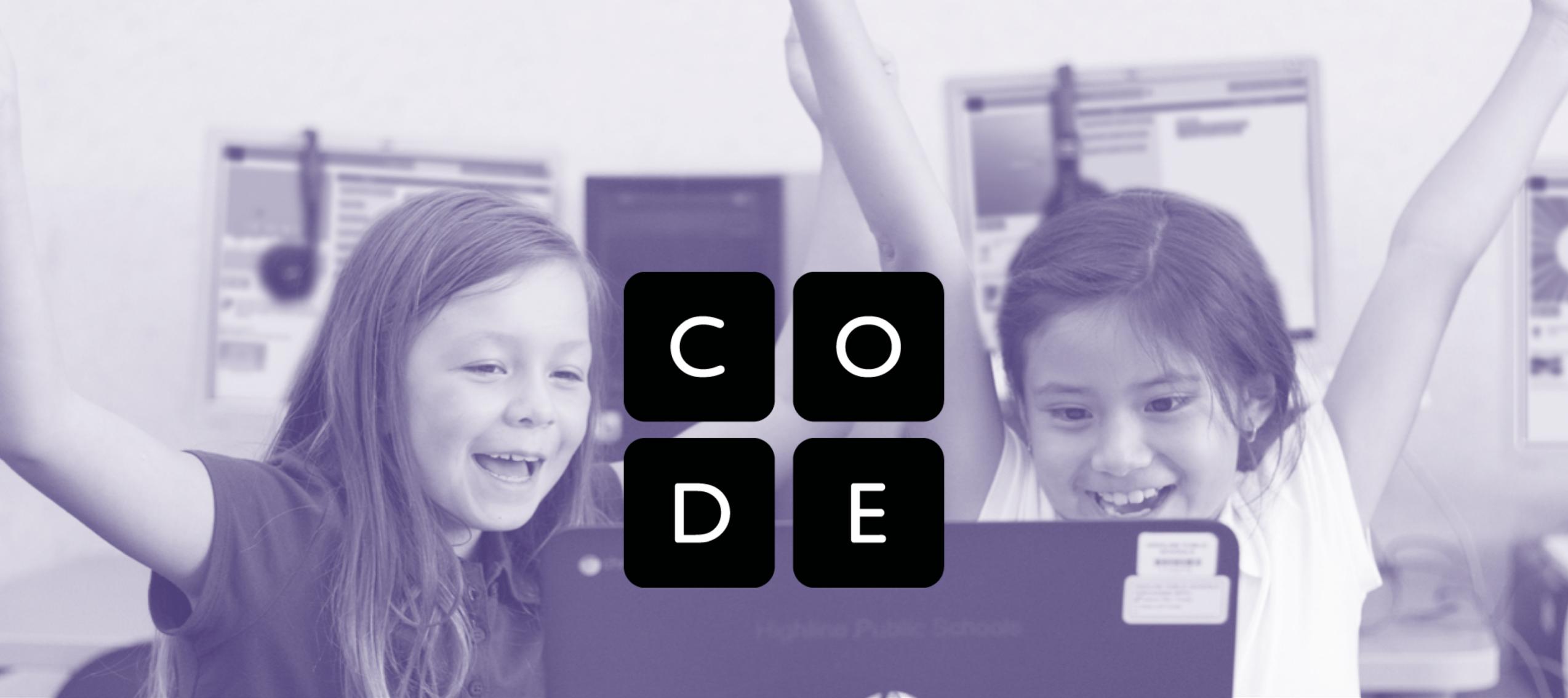


VISTA
EQUITY PARTNERS

BLACKROCK®



verizon✓



C O
D E

Hadi Partovi
@hadip, @codeorg