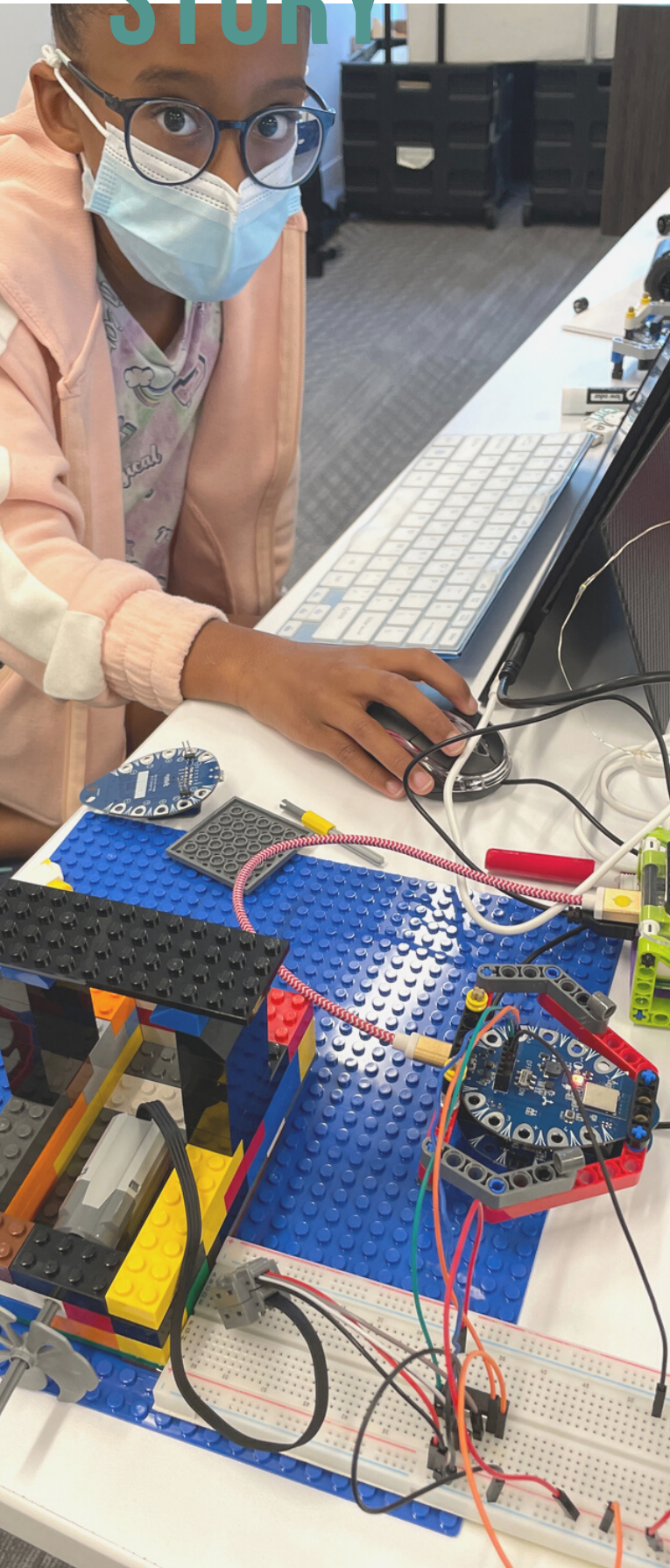Boolean Girl™

2022 ANNUAL REPORT

#SmartGirlsCode
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LILY'S STORY

Lily grew up in a small town where exposure to technology and computer science didn't exist. While her basic math and science classes prepared her for pursuing biology in college, it wasn't until college that she experienced computer science as a viable option.

With many friends studying it, Lily took a computer science class when she determined that medical school wasn't where she wanted to end up. Once in the class, she discovered that most of the students had had coding in high school.

Lily felt behind and had to put more effort into her study because she didn't have the fundamental background that her peers did. She worked hard and eventually graduated with a computer science degree.

Perhaps her journey could have been a bit smoother had she had opportunity to learn coding at an early age like those that participate in Boolean Girl programs.

Boolean Girl makes the journey to high paying, fulfilling STEM-based careers for young women like Lily possible - Join us in creating a journey to discovery.

WHO IS BOOLEAN GIRL?

The status quo in STEM is unacceptable.

Girls, students of color, and low-income children are not getting the STEM education they deserve. While some progress has been made in diversifying the sciences, an alarming lack of diversity persists, particularly in computer science. Girls make up 56% of students who take AP exams, but only 19% of those that take the computer science AP exam.

Students of color are more likely than their white counterparts to transfer out of STEM education into other pursuits. And by sixth grade, kids from middle-income households spend 6,000 more hours in after-school and summer learning programs than their low-income peers.

But it is not inevitable.

Because the research shows that early engagement prevents attrition, Boolean Girl centers our approach around inspiring kids before they reach the vulnerable age of dropping out. Starting with third-graders, we teach coding and engineering in a fun, welcoming environment, reversing the inequity that has plagued STEM for so long.

We are determined to build something better. As parents and engineers, educators and nonprofit leaders, our passion inspires us, and our teamwork propels us. If you are dedicated to promoting equity, if you believe in your power to effect change, if you want to create something transformative, then we need you.
                                    Will you join us?
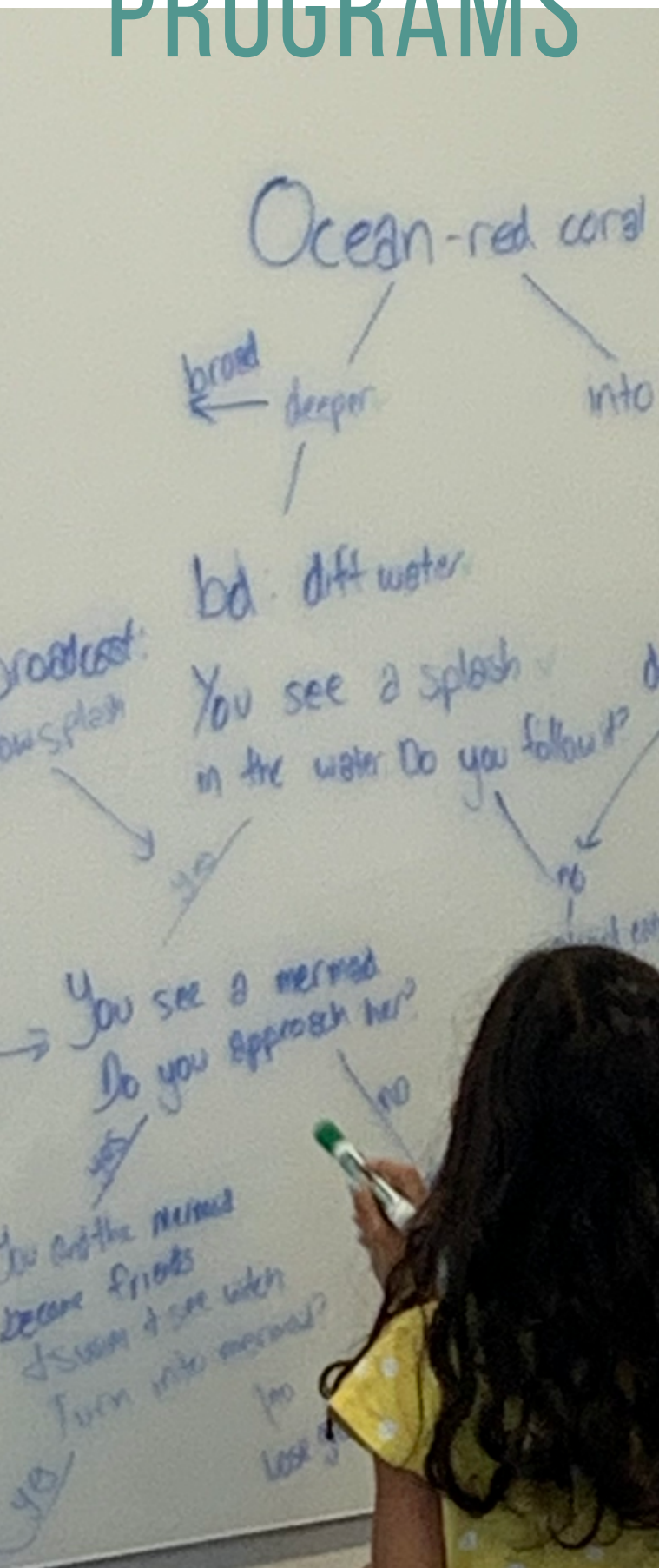
QUALITY PROGRAMS

Boolean Girl produces a variety of programs across a spectrum of experience levels and engagement opportunities from one-off events to extended courses. Here's a snapshot of how our programs create lasting impact.

400+ GIRLS

SUMMER CAMPS

At Summer Camp, Girls and non-binary individuals learn to code and build electronics. Each summer 100's of girls participate in our summer camps. Many girls participate in more than one camp. Camps are offered at multiple locations around the DC metro area and online. At our summer camps young learners really get to code, build,invent and animate. They can get started with beginning coding classes in Scratch, learn to code in Python, create DIY gadgets with electronic circuits, sensors, and motors using legos and other craft supplies. Boolean Girl is always adding new offerings, in 2022 two Artificial Intelligence/Machine Learning courses were introduced.

300+ GIRLS

SATURDAY CLUBHOUSE

Clubhouse happens on weekends during the school year. Girls and non-binary individuals learn to code and build electronics in a fun, collaborative setting. At Clubhouse, young learners receive coding and electronics instruction, get hands-on time to develop their own creative projects, and receive a lesson in "digital wellness" to promote responsible choices on computing devices. The lessons align with the summer camp curriculum and are a great next step after attending a free Hour of Code event. Clubhouse enrollment is limited so the groups are small and each participant has lots of one on one support from our faculty. Each season 100's of girls participate and get started or continue learning to code, build, invent, and animate.

800+ GIRLS

HOUR OF CODE EVENTS

During the school year Boolean Girl offers free Hour of Code events three times each month. The content varies each week but is aligned with our core curriculum. Young learners can engage in HOC in Scratch, Python, AI, and electronics. The HOC events are also a great way for Girl Scouts to earn their Coding for Good badges. Attend the age appropriate HOC and an Ambassador event to earn the rank appropriate badge.

> " My daughter absolutely loves the Advanced Scratch class. She found the instructors very kind and helpful and can't wait to attend the next class. She has been working on her project at home almost every day and has gained a lot of confidence in her coding abilities. Thank you.

Mom of 5th grader

18 AMBASSADORS

AMBASSADOR PROGRAM

Designed to introduce girls to different STEM fields and the women working in them. The Ambassador Program is a virtual event held monthly throughout the year. Women from NASA engineers to Disney artificial intelligence programmers join girls from around the country to discuss what they love about their work and how they got there. Participants are given an opportunity to have their questions answered.

> " Boolean Girl is the only camp my daughter has begged me to go back to. She had such a great time and couldn't stop talking about all that she learned."
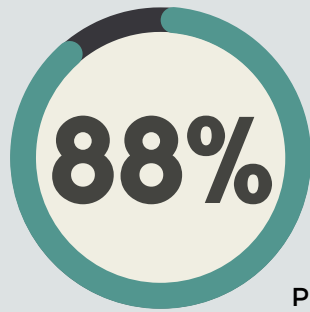>
> **Mom of 5th grader**

11 SCHOOLS

TEACHER COHORTS

New in 2021, our teacher's cohorts supported elementary and middle school teachers by bringing coding and other technology lessons into their classrooms as part of an after-school program or during the regular school day.
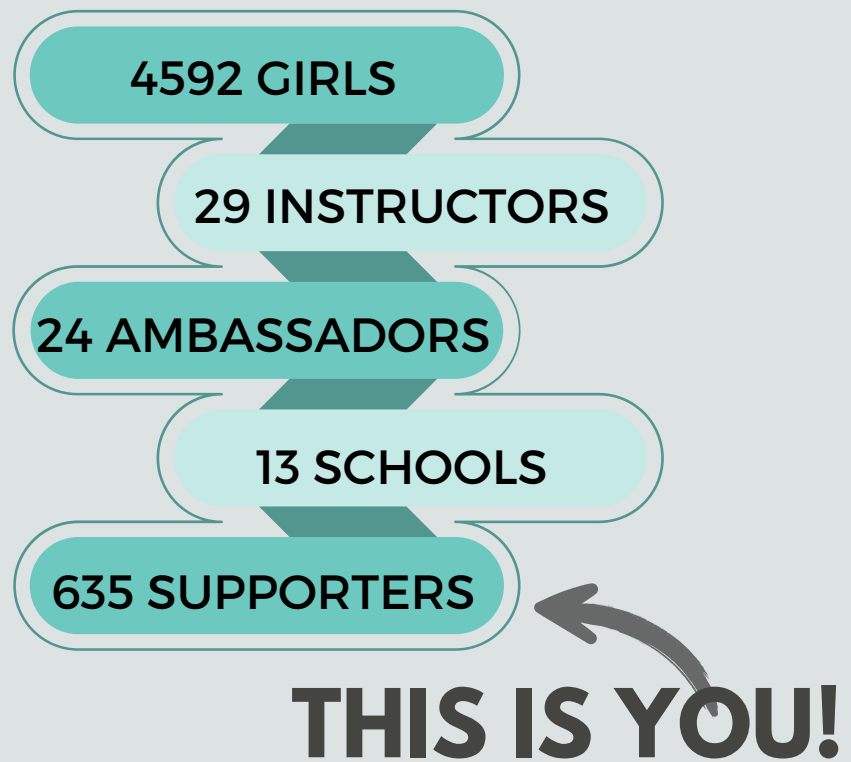
Through this program, we empower educators to teach computer science. We know that teachers are overworked and are being asked to take on more and more, often expected to learn STEM skills on their own and teach them in the classroom. By providing them with training and easy-to-follow lesson plans, we support their endeavors to incorporate STEM learning into their regular curriculum.

INCOME: $170,000
  EARNED: $70,331
  DONATIONS: $99,329

EXPENSES: $151,106
  OVERHEAD: $ 17,514
  CAMP COSTS: $76,949
  PROGRAMS: $ 56,616

4592 GIRLS

29 INSTRUCTORS

24 AMBASSADORS

13 SCHOOLS

635 SUPPORTERS

THIS IS YOU!

88% OF INCOME GOES DIRECTLY TO PROGRAM DELIVERY

LIFETIME IMPACT

Boolean Girl got its start in **2014**, teaching coding and engineering to girls at an elementary school in Arlington, Virginia. What began as a passion project soon caught on, and one thing became clear: we had hit upon an approach that was highly effective, with our impact expanding every year. We grew from reaching just 49 girls in 2014 to reaching thousands of girls each year.

In **2017**, we formed a nonprofit with an ambitious mission: to remake the face of the future workforce by empowering disadvantaged groups with in-demand skills. Our stats and awards tell the rest of the story:

• We've reached over **17,000 girls** since our founding, **20%** of whom came **from low-income familie**s.
• **96%** of girls at our camps say they would **take another coding class** with us and recommend us to a friend.
• The average **number of programs** that our students attend is **five**. We are not a "one-and-done" organization.
• We were named **"Best STEM Camp"** by Northern Virginia Magazine in 2018, 2019 ,2020 and 2021.
• We were named **"Best STEM Nonprofit"** by the STEM Symposium in 2018.

Despite this success, there is so much more work to do, and that is where you come in.
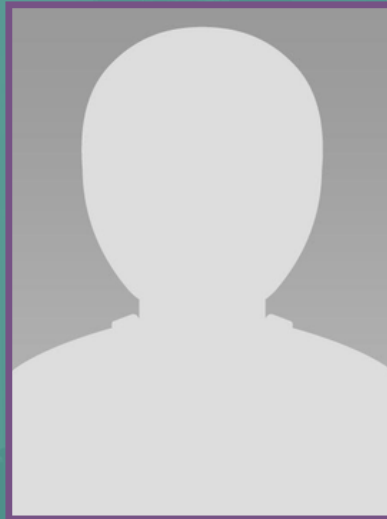
Boolean Girl Board

Maria Izurieta

Jennifer Ives

Zoe Kant

Cathy Burton

Regina Ridgley