At camp, girls find that coding indeed does compute

UTSA program lets the middle schoolers learn while having a good time

By Brooke LaMantia STAFF WRITER



Photos by Jerry Lara / Staff photographer

Erin Harris, 11, left, and her twin sister, Megan, work on their website during the University of Texas at San Antonio Girl CodeRunners workshop at the Good Samaritan Center on the West Side.

Arianna Gonzalez and Ariana Oranday are no strangers to computer coding, but they still were happily surprised at how the video game they had designed turned out.

It's one where players have to dodge falling eyeglasses and try to catch falling bananas.

"Every detail of coding has to be perfect," said Oranday, a seventh-grader from Great Hearts Middle School. "It takes a lot of time."



A calendar with the week's schedule is placed by the entrance to the workshop



Jerry Lara / Staff photographer

Sienna Lepe, 11, center, and Meerub Shahid, 11, right, get help with their website from UTSA engineering graduate student Moosfika Treesha during the Girl CodeRunners workshop.

examples that they can build on and give them interesting projects."

They were participating at the University of Texas at San Antonio's summer Girl CodeRunners camp, held at the Good Samaritan Community Services Center on the West Side.

There, middle school girls besides creating games learned how to code animation, build robots and design their own websites.

The two passed their shared laptop back and forth, trying to reach the best score on the game they both worked on. Gonzalez, an eighth-grader from Garcia Middle School, turned toward Oranday and pointed, saying:

> "She's the builder and I'm the coder."

> A \$100,000 grant from the Texas Workforce Commission to introduce middle school girls to STEM and coding allows the camp to be free for all participants for the six weeklong sessions, which end July 26.

"Not enough girls are following a career path in coding and programming," said Pranav Bhounsule, an associate professor in mechanical engineering who has a robotics lab at UTSA. "In order to make them excited about STEM, we do programming, use

Middle school was described as "the right time to get girls interested in STEM" by Bhounsule, who noticed a lack of female and minority students in his university classes.

The camp is run by seven UTSA teaching assistants, four of whom are women, led by instructor Juan Gonzalez, who teaches coding and math at Churchill High School.

"The lack of female representation in the field is upsetting," said one of them, Vedika Khanna, a senior at UTSA. "We can talk to the girls and explain that it's OK to be interested in STEM."

Gonzalez said his high school coding class was a "majority of boys enrolled, probably 80 percent," but added, "Girls bring a different perspective — I'm impressed by the quality of work."

The camp utilizes the online coding website Scratch to teach the girls the basics of coding and programming in a fun environment.

Participants Elizabeth and Mary Anna McFarland, home-schooled twin sisters, never had coded before.

"Programming the robot was the hardest part," Elizabeth said.

They plan to use their new knowledge to compete in Ag-Robotics in the upcoming school year, where they'll have to design a robot to wrestle with other robots.

"We'll name him Samuel the sumo-bot," Mary Anna said.

On the last day of the camp, the girls toured UTSA and learned about the college admission process. While they wanted to pursue different career paths after college, from digital design to medical school, they enjoyed what the camp had taught them.

"I've been to many camps but this is the first one where the adults have really talked to me and made me feel comfortable," Arianna Gonzalez said.

The girls earned raffle tickets all week to for a chance to win laptops, paid for by the grant, at the end of their session. brooke.lamantia

@express-news .net