

MEGAN LOH, GENDER & TECH ACTIVIST

WHY SHE IS A WHIZ KID

Created nonprofit organization GEARup4Youth as a way of closing the gender gap between underserved girls and technology.

As an elementary student, Megan Loh begged her parents to allow her to attend a technology camp.

She got her wish, and as she looked around the room, Loh realized she was one of only two girls in her camp class. The experience not only spurred her love for technology, but also sparked her interest in the technology gender gap she witnessed.

"I wanted to do anything I could to help make a change," Loh

AGE
16

CITY
PLACENTIA

SCHOOL
TROY HIGH SCHOOL

GRADE
11TH

said.

After learning that women hold about 15 percent of jobs in tech-related fields, Loh used her Girl Scouts Silver Award project to launch GEARup4Youth (gearup4youth.org) in 2015. With the mission of "gearing up girls with the technology of tomorrow," GEARup4Youth aims to bridge the gender gap

through technology-based programs, all designed by Loh. The nonprofit has mobilized 150 volunteers from 25 schools to bring activities such as Lego robot building and computer programming to underserved girls in classes at local libraries and Boys and Girls Clubs.

GEARup4Youth also has partnered with 200 public and private organizations to engage girls and their families through presentations, expos and other technology-related events.

To date, GEARup4Youth has reached more than 6,500 girls locally and in Malaysia, where Loh recently traveled.

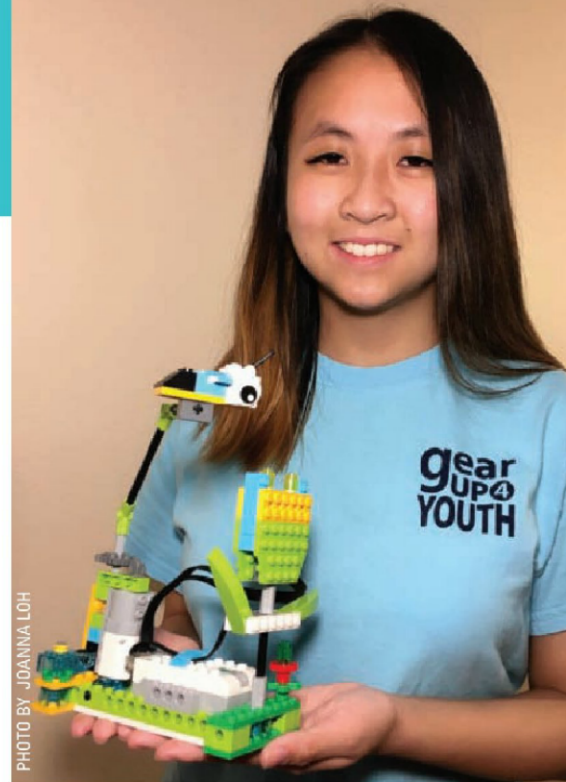


PHOTO BY JOANNA LOH

She has plans to continue to expand the organization's reach, both nationally and globally, inspiring the next generation of girls through

technology.

"I realized that I can do this," Loh said. "I can make a change in this world by spreading my love for technology."

GRANT SHEEN, SCIENCE & MEDICINE

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CITY
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SCHOOL
SAGE HILL SCHOOL

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PHOTO BY JEFF GRITCHEN

WHY HE IS A WHIZ KID

Developed a wireless, mobile system that assists patients with Alzheimer's disease and other dementia related disorders in communicating their basic needs.

Having spent significant time with his grandmother during his childhood, Grant Sheen was heartbroken when she began to develop Alzheimer's.

The disease progressed to a point where her once sharp speech had degraded into an incoherent mumble. After her passing in 2016, Sheen channeled his grief into action by working to develop a method of communication for those who have lost their words.

"It was one of the hardest experiences I've had to face," Sheen said. "I wanted to use my interest in computer science to help solve the problem."

The Sage Hill School student body president immersed himself in brain wave data housed at UC Irvine's Institute for Memory Impairments and Neurological Disorders (UCI MIND). Hours of

testing and research led to his development of software, a series of algorithms, that can identify brain wave thoughts between four basic needs — rest, read, eat and exercise.

Sheen paired the software with a wireless EEG headset, and after achieving 90 percent accuracy during a summer 2017 testing phase, he knew he had made a breakthrough in instant digital communication.

"It was an amazing moment," Sheen said. "I created something special and revolutionary."

His efforts earned Sheen a \$10,000 Davidson Fellows Scholarship, which he will apply to college studies that focus on computer science and business.

His goal? To develop his work into a product for the masses so families who face these challenges can better understand the needs of their loved ones.

Said Sheen: "I want it to be a product that consumers can afford and caregivers can use — something that reaches those in need."