http://www.pressandguide.com/news/dearborn-heights-teen-spent-summer-interning-with-nasa-program/article_721d8a18-9809-5c9d-a7ff-26dd98186978.html

Dearborn Heights teen spent summer interning with NASA program

Sara Komaiha, 16, was the only Michigan teen selected for project

By Micah Walker For The Press & Guide Aug 28, 2017

Crestwood High School student Sara Komaiha stands near the NASA rocket, the Saturn V, at the NASA Johnson Space Center in Houston, Texas. Photo courtesy Sara Komaiha

In late May, Crestwood High School sophomore Sara Komaiha received the news she had been anxiously waiting to hear for two months.

“I was so excited,” she said. “I was actually at lunch going through my emails, and I saw it, and I was like, ‘Oh my gosh, no way.’”

The news Komaiha received that day was her acceptance into the STEM Enhancement in Earth Science Summer Intern Program. Sponsored by NASA, the Texas Space Grant Consortium and the University of Texas at Austin Center for Space Research, the program offers incoming high school juniors and seniors across the country the chance to study NASA satellite data while working with engineers and scientists in their chosen field.

Now a high school junior, Komaiha learned about the program in her freshmen year, but was too young to apply. However, this past school year, the 16-year-old decided to fill out the application after receiving encouragement from her science teacher, Diana Johns.

“She knew I wanted to do something interesting with my summer,” Komaiha said. “I wanted to do something that would push me, something in my career path.”

“When I applied, I didn’t think I would actually get in,” she added, giggling.

Komaiha’s internship took place from July 15-29 at UT Austin, where she worked on a project titled “The Mid-American Geospatial Information Center Emergency Preparedness”. NASA scientist Teresa Howard taught Komaiha and six other interns how to use satellite data imagery to view the May flooding of the Meramec River in Missouri. The student said the interns were responsible for mapping the flood, finding the exact location of the incident, and examining how the flood affected the surrounding areas.

While a majority of the program had interns focused on conducting research on their various projects, the students were still able to have some downtime. Komaiha said she and her fellow interns traveled to Houston to visit the NASA Johnson Space Center. While there, she had the chance to talk to NASA scientists, astronauts and engineers, as well as see the Saturn V, a rocket used by the organization from 1967 until 1973. Developed for the Apollo program, the heavy lift launch vehicle was created to send humans to the moon.

The group also explored the Neutral Buoyancy Laboratory, an astronaut training facility. Space cadets can dive into a 6.2 million-gallon pool to practice tasks for upcoming missions that mimics the zero gravity they would feel in a spaceship.

Komaiha said one of her favorite things about the SEES program was meeting the other interns. Being the only intern from Michigan, the student talked to high schoolers from states such as Florida, Texas and Washington.

“Since they were the same age as me, they told me a bunch of different places I should apply to next year,” she said. “It was nice to see their background and what they did. I made some really good friends.”

The SEES internship is the second time Komaiha has been a part of a NASA-sponsored program. For the past two years, she has participated in the Global Learning and Observations to Benefit the Environment Program. According to its website, GLOBE connects students, teachers, scientists and citizens from around the world to conduct hands-on experiments focusing on the environment.

Komaiha joined the program in her freshman year, conducting a project with her sister and sister’s friend on a type of particle called aerosols. The three competed in a student competition in Toledo, winning first place. Last year, Komaiha organized another project on aerosols, this time with four friends. They researched how aerosols affect global warming in comparison to the gases sulfur dioxide and ozone. Komaiha returned to the Toledo competition in May, where she won first place for the second time. In addition, the team was granted the opportunity to present research to faculty at Purdue University in Indiana.

This year, Komaiha plans to use the tools she learned while studying the Meramec River to research water levels in the Ecorse Creek, a body of water that runs through Dearborn Heights and surrounding communities.

After her two weeks in Texas, Komaiha returned to Dearborn Heights with a new career interest: aerospace engineering. She said she thought about going into the medical field, but changed her mind after attending the internship.

“This program really opened my eyes and pushed me to go into engineering,” she said. “It’s amazing!”

Komaiha plans to study the field in college. Her top two schools are the University of Michigan and the Massachusetts Institute of Technology, both known for their aerospace programs.

“Sara is an exceptionally intelligent, caring and talented young lady,” Johns said. “She is someone who isn’t afraid of hard work and taking on the time-consuming job of doing rigorous research, and at the same time, taking AP classes. I am very proud of her.”