

AMBASSADOR CYBERSECURITY TECH CAMP

2022 SUMMARY REPORT

Dr. Myounggyu Won, Organizer

The Center for Information Assurance (CfIA) successfully hosted its' annual summer Cyber Ambassadors Tech Camp from July 5 - 7, 2022. The three-day event was held on the University of Memphis campus in Dunn Hall. The event organizer was Dr. Myounggyu Won, Assistant Professor in the Computer Science department. There were approximately twenty-one (21) high school students that participated in the in-person / hands-on workshop this year. They learned about Computer Science, Basic Programming, Cybersecurity, and the Internet of Things (IoT), among other related topics.

The student's week of summer camp was divided into multiple sessions that allowed them to engage in a variety of activities.

The camp started with a welcome greeting from the Chair of Computer Science department, Dr. Lan Wang, and the Director of the Center for Information Assurance, Dr. Dipankar Dasgupta. The students were also given an overview of the University of Memphis' Information Technology Security (ITS) policy by Mr. Jarrod B. Taylor.

Since the Ambassador camp students are minors, the appropriate background checks and associated forms for all volunteers and staff were signed, dated, and returned to Dr. Won as per University HR policy. Also, an email was sent to all parents with instructions for the drop off / pick up location, times, a map of the campus, and other important information for parents.

On day one of the camp, classroom instructions began with Dr. Myounggyu Won, he introduced the students to the basics of IoT programming I/II. The students were engaged in this topic and asked very good questions. Later after the lunch break, Dr. Kan Yang gave a

talk on “Hands-on Cybersecurity Game: Code, Password, and Social Engineering.



“I am the person that I am today because of Tech camp 2022”

On the second day of the Ambassador camp, Dr. Myounggyu Won continued with his Basic Programming lecture on IoT. The next instructor for the students today was Mr. Top Malasri. His topic was “Programming for High School Students”. Later after the lunch break, the students were involved in an advanced programming lecture/interaction with Dr. Myounggyu Won. Later, the students were attentive to a talk by Dr. Dasgupta on “Cyber Safety and Security Issues Today”.



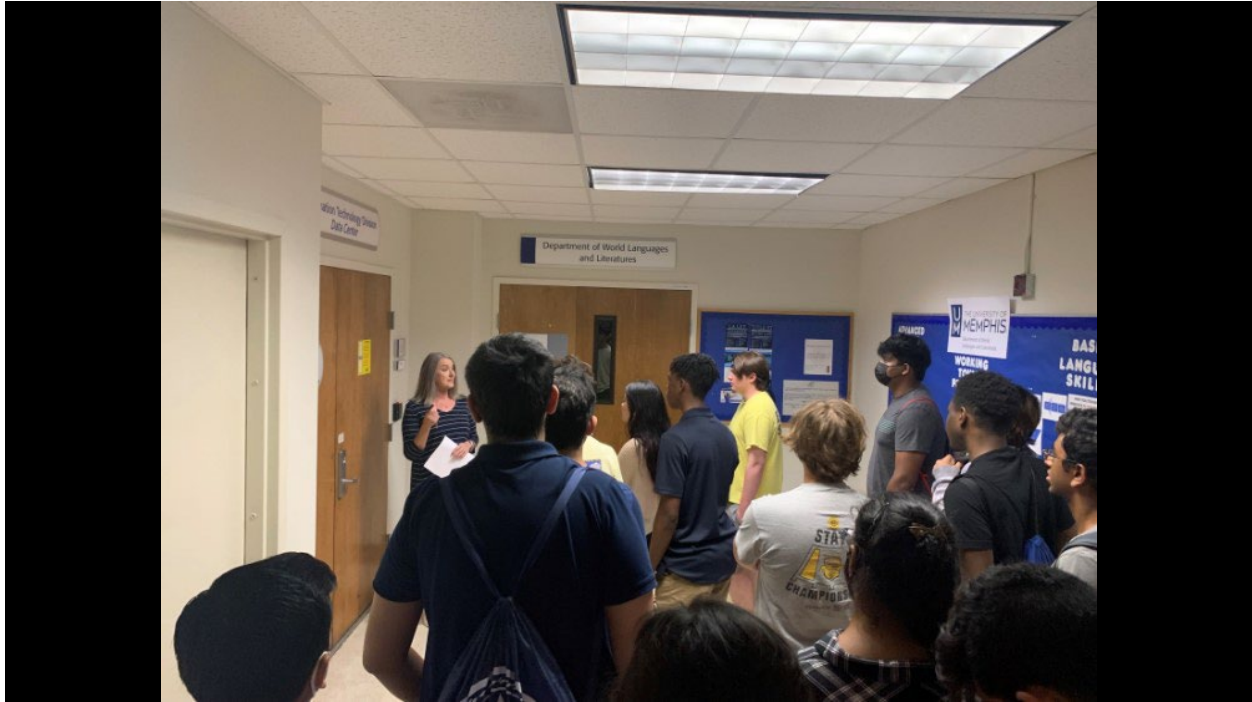
“The Future Depends on What You Do in Tech camp 2022”

On the third day of the Ambassador Tech camp the students were involved in some hands-on activities with the Android programming starter kits. The students also worked on team projects under the guidance of Dr. Myounggyu Won. Later in the morning, the students took a tour of the University of Memphis’ Data Center department in Jones Hall. The students asked engaging questions of the data center staff members, which was led by Ms. Becky Amos. The students had a lecture on some advanced programming (IoT) and also finished work on their team projects. The students were escorted by staff members to the university center’s dining room to enjoy their lunch daily.



“The Best way to Predict the Future is to Create It by Attending Tech Camp 2022 at the University of Memphis”

As the week came to an end, there was an Award Ceremony in which each participating student was presented with a certificate of completion by Dr. Won. The parents were also invited to attend the ceremony, and many proud parents were in attendance. The students completed a post camp survey to share their impressions / experiences of what they had learned during the week. The closing remarks were delivered by Dr. Dipankar Dasgupta and Dr. Won.



“Nothing Good comes from the Comfort Zone – Tech Camp is Great”

SUMMARY:

The Ambassador Cyber Security Tech camp for High school students was a very successful camp event. Dr. Won invited the students to come again next summer for some new and challenging activities in store. He also encouraged enrollment at the University of Memphis in the future as a Computer Science (Cybersecurity) major/minor student.

ACKNOWLEDGEMENTS:

We would like to thank my Team (Tony Pinson, Doris Allen, Debera Pittman, Kriangsiri ‘Top’ Malasri, Andrika Cheairs, and Ken Schnarrs) for their help during this successful Cybersecurity camp experience for young students. Special thanks to Dr. Wang, Dr. Dasgupta, & Dr. Yang.



“You can leave Tech Camp, but Tech Camp never seems to Leave You!”

AGENDA (Synopsis):

2022 Cyber Ambassadors Tech Camp

Tuesday, July 5

Times, Activities, Instructors, & Location

8:45 Arrival Dr. Myounggyu Won Dunn 118

9:00-9:15 Welcome by Department Chair Dr. Lan Wang Dunn 118

9:15-10:05 Internet of Things (IoT) Programming, Dr. Myounggyu Won Dunn 118

10:05-10:20 Break

10:20-10:50 Campus Network Use Policy and Ethical Issues, Mr. Jarrod B Taylor

10:50-11:00 Break

11:00-11:50 Hands-on Cybersecurity Game

12:00-1:00 Lunch

1:00-1:50 Internet of Things (IoT) Programming, Dr. Myounggyu Won Dunn 118

1:50-2:00 Break

2:00-2:50 Internet of Things (IoT) Programming, Dr. Myounggyu Won

Wednesday, July 6

8:45 Arrival Dr. Myounggyu Won Dunn 118

9:00-9:15 Welcome by Director of CfIA Dr. Dipankar Dasgupta Dunn 118

9:15-9:50 Internet of Things (IoT) Programming, Dr. Myounggyu Won

9:50-10:00 Break

10:00-10:50 Internet of Things (IoT) Programming, Dr. Myounggyu Won

10:50-11:00 Break

11:00-11:50 Programming for High School Students, Mr. Top Malasri

12:00-1:00 Lunch

1:00-1:30 Cyber Safety and Security Issues Dr. Dipankar Dasgupta

1:30-2:00 Break

2:00-2:50 Internet of Things (IoT) Programming, Dr. Myounggyu Won

Thursday, July 7

8:45 Arrival Dr. Myounggyu Won

9:00-9:50 Programming for High School Students II Mr. Top Malasri

10:00-11:00 A Tour of University of Memphis Data Center

11:00-11:20 Break

11:20-12:00 Internet of Things (IoT) Programming V, Dr. Myounggyu Won

12:00-1:00 Lunch

1:00-1:50 Internet of Things (IoT) Programming V (Project) Dr. Myounggyu Won

1:50-2:00 Break

2:00-2:50 Award Ceremony Dr. Myounggyu Won

2:50-3:00 Closing Remark Dr. Dipankar Dasgupta, Dr. Myounggyu Won

2022 AMBASSADOR TECH SUMMER CAMP

The following Mid-South High Schools were represented at this year's event:

- I. Collierville High School
- II. Ridgeway High School
- III. Lausanne Collegiate School
- IV. Desoto Central High School
- V. Lewisburg High
- VI. Overton High School
- VII. Home-School Students

*Special Stats:

- The average age was 16 years old.
- There were three female students, which we were delighted to have in attendance.
- The school with the most in attendance was Collierville HS.
- The post survey comments were very positive from the students, with a couple mentioning they would like to see more challenging projects next year. Also, there were some comments on wanting to work with Python more in the next camp.