

Making a Game of IT



6/18-6/22

One session during the summer was attended by 17 total participants with a variety of males and females (29% Minority). The participants ranged from high school sophomores to high school seniors. Students came from all over the United States and were selected based on GPA, transcripts, and completed applications.

Funding

Participants paid a fee of \$825, which covers all academic sessions, recreational activities, as well as room and board.

Objectives

The program goals are to:

- Expose participants to one of the most popular programming languages, Python, through hands-on activities and short lectures
- Learn how to develop their own software in Python
- Develop teamwork and problem-solving skills
- Design and implement a video game that participants can play at home and with their friends
- Apply Science, Technology, Engineering and Math (STEM) knowledge to solve problems
- Analyze and interpret data
- Provide participants with an authentic university environment and experience

Description

Intended for rising high school juniors and seniors seriously considering Computer Science and Engineering as their career choice, the program is designed to teach programming skills, including building video games, learn problem solving, logic, and of course, coding. Students were given an in-depth look at computer programming, preparing them to enter Computer Science majors at MSU and other universities. Presentations by faculty and graduate students trained in teaching interested students to program for the first time were given to ensure a top-notch experience. Programs include approximately 30 intentional contact hours each session.



Outcomes

Participants completed a post-evaluation and provided the below feedback on several aspects of the program, including academic sessions, college readiness, staff, social activities, and more.

- The highest-rated benefits of the program were developing both personal and academic skills, getting to meet people different from themselves, and gaining computer skills
- After participation, the majority of participants listed their preferred career choice as Computer Science, or a career related to computing and/or engineering.
- 88% of participants rated the program as "Excellent" or "Good"
- Participants also agreed that mentors and faculty were knowledgeable, easy to approach, helpful, and a contributing factor to their overall success in camp.

Participant testimonials:

- "Thank you so much for giving me the opportunity to be here. This camp will definitely help me in the future"
- "The best part of the MGIT program was programming my own game with others"
- "Thanks for making camp so much fun!"
- "The fun activities helped to break up the classes and keep us motivated"

Additional Significant Information

MGIT staff includes Computer Science and Engineering faculty and graduate students, as well as graduate and undergraduate student mentors. The coding sessions provide a great opportunity for prospective students to explore different aspects of programming, such as variables and loops, PyGame, graphics, and sound effects.

Contact Information

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