# Introduction to Robotics Engineering

July 21-27, 2013



Open to students entering the 10th-12th. Interested students apply and are selected based on GPA, transcripts and completed applications. This program was attended by 12 students that came for Michigan and California.

# **Funding**

Participant pay a fee of \$700 that covers all activities and includes room and board.

## **Objectives**

- Provide students with an introduction to the fascinating field of robotics.
- Expose students to specific research related to robotic engineering.
- Explore the engineering fields involved in robotics.
- Build team work skills

#### Description

Designed for students interested in exploring the exciting field of robotics. Students will learn about the fields of engineering involved in robotics and will work with NXT and VEX robotics, biomimetic robotic fish, nanorobotics, mechatronics and, manufacturing automation.

### **Outcomes**

Students completed program evaluations on the last day of their program. The students feedback below focuses on their experience including educational sessions, instruction, mentors, and social activities.

- Students indicated that IRE helped them identified their interest towards engineering.
- The program helped them improve their personal and academic skills.
- The instructors and staff received high remarks based on the knowledge and helpfulness.
- The robotic sessions that received the greatest scores were Bio-Inspired Robotic Design, Biomechanics, VEX Robotics and Luminescent Art.
- The social activities of the programs also contributed to the student's team building skills and the preferred activities were sports, laser tag and bowling.



# **Additional Significant Information**

IRE incorporated topics from faculty and research related to Robotics Engineering for Better Life and Sustainable Future, as part of the NSF RET program of the College of Engineering.

#### **Contact Information**

Luis Donado

Assistant Director for Recruitment and K-12 Outreach,

Summer Program Coordinator

428 S. Shaw Ln, Room 3200 EB

Michigan State University

East Lansing, MI 48824

Phone: 517-353-7282

Email: donadoto@msu.edu

Program Website: http://www.egr.msu.edu/future-

engineer/programs/introduction-robotics-engineering-msu-

residential

