ENTER THE WORLD OF ROBOTICS!

Rising high school juniors and seniors are invited to apply for an intensive summer Robotics Camp offered by the Department of Electrical and Computer Engineering at The College of New Jersey (TCNJ), and sponsored by the Institute of Electrical and Electronics Engineers (IEEE), the Association for Computing Machinery (ACM), and GameX.

The intent of the camp is to motivate the most creative minds of a new generation of prospective Electrical and Computer Engineers to become global leaders in an increasingly technological world. The program aims to create a community of students who participate in and contribute to an intensive and powerful academic experience delivered by distinguished educators and professionals.

Camp participants will be introduced through a residential College academic experience to the exciting field of Electrical and Computer Engineering, and will learn topics not traditionally taught in High Schools such as Microcontroller Programming, Sensing Systems, Digital Electronics, and more.

The participant will work with Electrical and Computer Engineering students and professors, and interact with professional engineers from the Industry.

TCNJ offers a superior learning environment, and these experiences take place in specialized laboratories.

The College of New Jersey

CONTACT INFORMATION

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This Summer, get kids to turn off the TV and tune into a new world of learning and fun.

Electrical and Computer Engineering

The College of New Jersey

2000 Pennington Road

Ewing, New Jersey 08628-0718

Annual Robotics Summer Camp at The College of New Jersey

July 11-23, 2010

acm

IEEE

www.tcnj.edu/~summer/programs/roboticscamp

WHAT IS ROBOTICS?

Robotics is the science and technology of robots, their design, manufacture, and application. It requires a working knowledge of electronics, software, and mechanics. Before the coining of the term robotics, there was interest in ideas similar to robotics (namely automata and androids) dating as far back as 400 BC. Robotics are used in industrial, military, exploration, home making, and academic and research applications. Although the appearance and capabilities of robots vary vastly, all robots share the features of electronic sensors, and a movable structure under some form of autonomous electronics, computer, and software control.

TCNJ ROBOTICS CAMP:

Students will build, program, and use their own robot. Each participant will receive a robotics kit, and at the end of the camp they get to take home their own robot. The Kit provides everything necessary to build an expandable robotics platform. During the process of building their robot, students get to perform a series of activities, which culminate with a robotics competition.

The activities introduce motor control and interfacing your robot to the human world to avoid objects, following light, provide sound and light feedback, and the Roborealm computer vision and robotics development platform and environment in the advanced session.

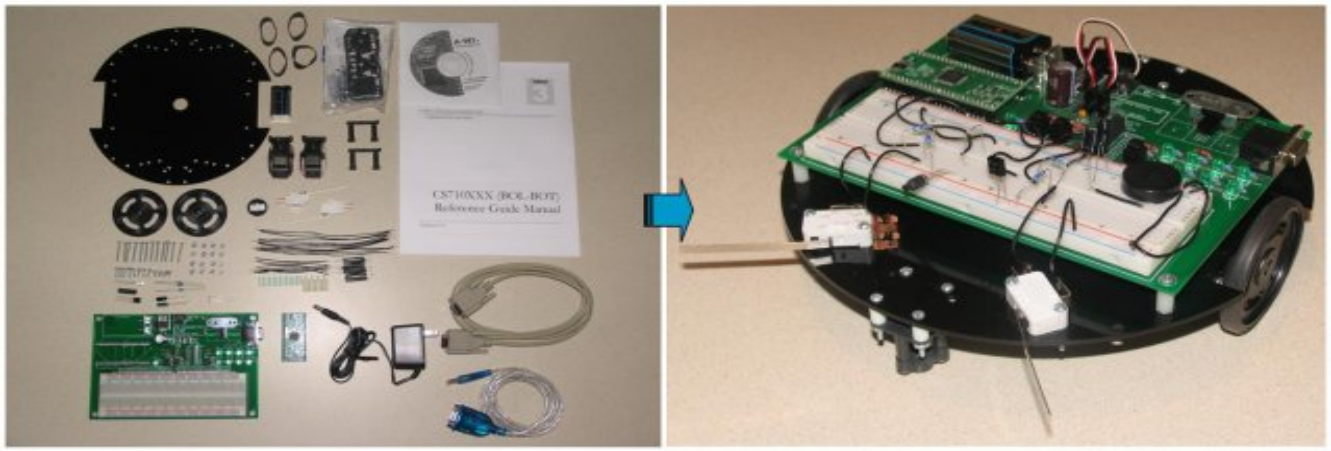
WHO SHOULD APPLY:

Eligible camp participants are students who will be high school sophomores, juniors, or seniors during the 2010-2011 school year, and rank at the top 30% of their class, have an interest in robotics or engineering, and have successfully completed one year of college prep mathematics (preference will be given to those who have completed algebra).

A TYPICAL CAMP DAY INCLUDES:

- Interesting electrical and computer engineering sessions each morning and afternoon, and their application to your robot.
- Hands-on robot building, programming, and utilization facilitated by TCNJ faculty and students.
- Hands-on utilization of wireless technologies and computer vision and robotics development platform.
- Site visits to facilities where state of the art electronic and computer technology is being developed, and meeting with practicing engineers.
- Fun evening and weekend activities.

At the end of the week, a prominent guest speaker from the Electronics/Computer Industry will give a special presentation about their organization and the industry.



LOCATION & COST:

The camp will be held at the beautiful campus of The College of New Jersey, Ewing, NJ. Participants stay in a TCNJ air-conditioned residence dorm and are chaperoned by electrical/computer engineering students.

Fundamental Session: July 11-16, 2010

Advanced Session: July 18-23, 2010.

Both Sessions: July 11-23, 2010.

Cost of the camp: $1457 for a single session and $3156 for both sessions; however, all students accepted to the camp will receive a $300 scholarship per session.

TOTAL Cost of Camp: $1186 for one session or $2585 for both sessions (includes a non refundable $29 application fee).

This covers robot kit, tuition, educational materials, room and board, and entertainment expenses. Camp participants must provide their own transportation to and from Ewing, New Jersey.

Limited number of seats are available for this program. Interested students should submit an application as early as possible. Apply online at:

tcnj.edu/~summer/programs/roboticscamp

All applications must be received by May 15, 2010.

All applicants will be notified by May 31.

PAYMENT WILL BE DUE JUNE 15, 2010.