

University of Central Florida
College of Engineering and Computer Science
Internet Science and Technology Fair (ISTF) News Release
Pre-College Student Team Winners Announced



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During fall of 2007, one hundred and sixty seven elementary, middle and high school student teams from 10 states enrolled to participate in the 2007-2008 ISTF Program. One hundred and fifty nine student teams completed their final project websites at the end of February 2008. Following the preliminary round of judging, 59 teams advanced to the final round. Six student teams from schools in New Jersey, Florida and South Korea emerged to capture top awards in the 11th annual [Internet Science and Technology Fair \(ISTF\)](#). The ISTF program challenges students to research the use of [National Critical Technology \(NCT\)](#) applications as they solve real-world problems using information technology tools. Students develop critical thinking skills as they work on-line with practicing professionals and publish their final research findings in a webpage format.

The six teams that won the highest honors are from:

- Mainland High School, Daytona, Florida, where a high school student team researched “microwave power transmission to bring energy derived from a fusion power plant from the moon to the earth.”
- Bergen County Academies, Hackensack, New Jersey, where a high school team focused their research on the use of a system that “utilizes RFID tags to keep track of the people on each floor of a burning building, allowing firefighters to determine where their help is needed and where it is not.”
- Sterling Park Elementary, Casselberry, Florida, where the student team researched the use of a seismic sensor to “help (a) scientist detect where they think a sinkhole might occur.”
- Center for Advanced Technologies, St. Petersburg, Florida, where a middle school student team researched a “design that will be more efficient and cost effective than current solar trough systems.”
- Cheongshim International Academy, Gyeonggi-do, Korea, where a high school student team project “focuses on building the simplest autonomous aerial robot that is applicable to Micro Air Vehicle.”
- Center for Advanced Technologies, St. Petersburg, Florida, where a middle school student team researched a solution to “stop fertilizers from entering the ocean.”

In addition, ten other teams earned Honorable Mention Certificates from the University of Central Florida's (UCF) College of Engineering and Computer Science (CECS), host institution for the ISTF. All finalists, award recipients, and links to winning projects from this year and past years are viewable on the [Winners](#) page.

The ISTF challenges students to work as a team and learn how to communicate on a long-duration project. It also demonstrates the important role basic research skills play in the innovation process. As one student team reported, *“Teamwork was an integral aspect of our project throughout its course. By dividing up different parts of the projects, we were able to efficiently finish the project in a timely manner.”* The members of another student team cited what they had learned about research and innovation. *“Our group learned that research is difficult and takes time. It requires extensive research to produce a real world solution.”*

Practicing professionals (such as scientists, engineers and medical technologists) participated as on-line subject matter experts, some reviewed the technical content of student teams' proposed innovations and others were final round judges. Below are remarks from two of the technical reviewers.

“I believe this has been a unique opportunity for the students to work on a cutting edge technology that will be coming into fruition over the next several years. The information provided on their website is practically a tutorial for this up-and-coming technology and on what it is all about – I commend them on their great job and diligent research.”

“In closing I want to say good luck with the project and keep up the good work. If you take one thing away from this project let it be what is written in your team assessment: We learned cooperation by working together on tasks (teamwork). I realize you are fifth graders and that you have a long way to go in your scholastic careers but someday you all will be adults and working in careers that hopefully challenge and inspire you. Learning the concept of teamwork and the importance of cooperation now will take you one step closer to changing the future when you get older.”

Each year, the student teams that participate, owe their ISTF experience to the dedication of one or more pioneering teachers at their schools. Most teachers recognize the program as a learning experience that combines both theory and practice in a way that complements classroom activities. As one teacher indicated in his/her final analysis, *“The ISTF is a learning experience not only for the students, but also the teachers. We learn about new areas of research, developments in various fields and technologies. Most important, however, is that as you work with your students more than usual when you are involved in such projects, you realize their potential, and help them realize it as well, taking them and their work to greater heights.”*

The 12th annual ISTF competition officially starts in September 2008. Interested teachers, technical professionals and parents are encouraged to support students' interested in participating. Those who are new to the ISTF process should visit the [“Prepare for 2008-2009”](#) as it provides a good starting point to become familiar with our program.

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