

Members: [Log in](#) | Not Registered? [Register](#) for free extra services.

San Antonio Business Journal - April 19, 2010
<http://houston/othercities/sanantonio/stories/2010/04/19/story3.html?s=industry&b=1271649600%5E3194841>

HOUSTON BUSINESS JOURNAL

Friday, April 16, 2010

Cyber security contest pits defenders against hackers

San Antonio Business Journal - by [Mike W. Thomas](#)

While it may not be as spectator-friendly as the Women's Final Four, the annual cyber defense competition, known informally as the Elite Eight, holds the same level of importance for the dozens of college students who will be in San Antonio this weekend to participate.

Now in its fifth year, the National Collegiate Cyber Defense Competition (NCCDC) is being held April 16-18 at the Hilton San Antonio Airport hotel. The competition was created and is hosted by the Center for Infrastructure Assurance and Security (CIAS), a nationally recognized leader in cyber security education and training at the [University of Texas at San Antonio](#).

Eight teams, the winners of eight regional contests around the country, will compete over a three-day-period for the title of Cyber Defense champion and the coveted Alamo Cup.

"The National Collegiate Cyber Defense Competition continues to grow from the single regional competition five years ago to the eight regional events and several state qualifiers this year," says Gregory White, director of CIAS and an associate professor of computer science at UTSA. "The feedback we get from both the faculty and students is phenomenal. Both are enthusiastic about the real-world training that the competition provides — something that the students don't see in the normal academic lab."

Game theory

NCCDC is designed to test how students operate and manage a network infrastructure similar to that found in the commercial sector. While somewhat similar to other cyber defense competitions, NCCDC distinguishes itself by focusing on business operations and incorporates the operational aspect of managing and protecting an existing network infrastructure.

Each team consists of up to eight students who must imagine that they are new network security administrators at a small company.

At the start of the competition, they are set up with a network for a fictional business complete with e-mail, Web sites, data files and users.

They must quickly familiarize themselves with the system and begin installing security updates and patches before a team of professional hackers starts to probe their network for security vulnerabilities.

Scoring is based on keeping required services up, controlling and preventing unauthorized access, and completing business tasks that are provided throughout the competition.

"It is very realistic in that you are not just worried about being attacked, but also with keeping your business going," White says.

This year the teams will have an additional challenge in which they will have to deal with a Web application-based cyber attack developed by San Antonio-based [Denim Group](#).

Denim Group is contributing the attack component for the competition so that participants will be exposed to the more sophisticated threats that exist when sensitive software systems are exposed on the Web, says Dan Cornell, chief technology officer for Denim Group.

"The national trend is for more enhanced cyber security training," Cornell says. "These application-level components help take the NCCDC's competition to a new level."

Denim Group develops secure software, helps organizations assess and mitigate risk with existing software, and provides training on best practices in software security.

"Having Denim Group participate in this event makes this competition even more invaluable because this is the first time we've been able to include application-level attack scenarios for these competitors to deal with," says Dwayne Williams, associate director of special projects at CIAS.

Emphasis on teamwork

White says that most computer science courses are not known for stressing teamwork activities. But that is exactly the kind of skills students have to develop to be successful in this kind of competition.

"Outside of this competition, there are few opportunities for computer science students to work as a team toward accomplishing a goal," White says. "But that is what they will be facing in the real world."

The companies that sponsor the annual tournament are looking for students with these kinds of skills as prospective employees, Williams notes. Last year, [Boeing Corp.](#) was so impressed with the team from Cal Poly Pomona — winners of the West Coast Regional contest — that they hired seven of the eight team members immediately after the competition.

Corporate sponsors

NCCDC is sponsored by a variety of San Antonio and national businesses in the information security, information technology, broadband and publishing industries.

Major sponsors include Cisco Systems, Core Security Technologies, **Microsoft**, G-C Partners and **Northrop Grumman**. Donated hardware and software from the sponsors are used in the competition to provide students with opportunities to work with technologies they would never see in a typical classroom.

“Our sponsors want access to these students because they have the type of skills they are looking for,” Williams adds.

The national competition costs about \$500,000 to put on each year as the winning teams are flown in from all over the country and put up at the Hilton.

White says he hopes to get even more sponsorships in the future so that CIAS can provide more support for the regional competitions that take place earlier in the year.

Beginning in 2011, international accounting and consulting firm Deloitte LLP has agreed to become the name sponsor for the NCCDC. Paul Nadeau, managing partner for Deloitte’s San Antonio office, says his firm is anxious to build up its presence in the local community and sees this sponsorship agreement as just that kind of opportunity.

“We are very supportive of what has been happening in San Antonio with regards to cyber security,” Nadeau says, “and we see this event as an excellent vehicle for building up even more support and recognition in this market.”

The CIAS has also established partnerships with major governmental and organizations, such as the U.S. Secret Service, the Department of Defense and the Department of Homeland Security — which is a lead sponsor of this year’s competition. The CIAS is the operational division of the UTSA Institute for Cyber Security. It was established in June of 2001 as part of UTSA’s creation of a cyber security program.

The university was recognized in 2002 by the National Security Agency as a leader in the field of infrastructure assurance and security as it was designated a Center of Academic Excellence in Information Assurance Education.

All contents of this site © American City Business Journals Inc. All rights reserved.