'Hackers' take aim at attackers

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In a modern day version of capture the flag, students at UCSB went up against about a dozen teams from universities across the country in a computer hacking contest meant to test their skills at detecting and combating breaches in network security.

With names like Whitehat, Nebuchadnezzar, Wolf Pack and Shrek, the teams of computer science students spent most of the day Friday hunched over keyboards writing so-called patches to correct vulnerable code lines in software or sneakily probing competitors' sites.

Scoring was based on how long the teams were able to maintain the service for their sites and how often they were able to break into their opponents' systems.

One of the UCSB teams, Whitehat (a term reserved for "good-guy" hackers) maintained their lead throughout the day. They beat out students from West Point, the Naval Post Graduate School at Monterey, University of Texas at Austin and Georgia Tech among others.

The organizer of the event, professor Giovanni Vigna, set it up as part of his graduate class on Network Security and Intrusion Detection. Mr. Vigna has found that the hands-on exercise is one of the most effective tools in teaching network security. The idea isn't to create skilled hackers, but highly trained guardians of computer networks able to combat nefarious attacks on a system's security.

"Unless you know about how to break into a system, you can't really learn how to stop it," he said. "The point is to teach how to detect..."
vulnerabilities and to show how to fix them.”

UCSB has established a strong reputation for teaching computer network security, said Engineering Dean Matt Terrill, who stepped in to watch the event. Meanwhile, a panel of graduate students monitored the computer traffic and the scores were projected onto a wall on the entrance of the Engineering Building. UCSB computer science professor Richard Kemmerer has been devising computer security systems for 25 years, starting when the Internet was in its infancy.

The proliferation of computers and computer networks hooked to the Internet has been mirrored by increasingly sophisticated acts of mischief that range from what could be termed as vandalism, denials of service and viruses, to the use or destruction of sensitive information.

While Whitehat team member Egil Oesthus was busy hacking into opponents' systems, teammates Susana Aguiar and Gabriela Creta were monitoring those trying to hack their team server. Others on the team were quickly going through the source code trying to correct problems that could be exploited by their rivals. The students used everything they learned in Mr. Vigna's class, from his crash course in cryptography to how hackers use spoofing, sequence number guessing and port scanning to find vulnerabilities.

**STEVE MALONE / NEWS-PRESS PHOTOS**

*Giovani Vigna of UCSB monitors the student hackers.*

*The intense Whitehat team of UCSB computer science students won the day in an anti-hacking exercise.*