

# Student Innovations

at the Center for Professional Development 

## Wireless Networking

### Students:

**Dennis Hasenfang**  Undergraduate, Information Technology and Management  
**Michael McLone**  Graduate, Information Technology and Management  
**Chris Willis**   Graduate, Information Technology and Management

### Faculty:

**Bill Lidinsky**    Alva C. Todd Professor and Assistant Director of Information Technology and Management

### Project:

"Apply existing technology to solve a real-life problem" for the System and Network  Security class.

### Outcome:

Building on their previous success of devising technology to secure a DHCP Server on a Local Network, these students went on to enhance computing at the Rice Campus by adding Wireless Networking.

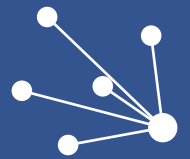
The group used their education and experience to successfully implement a Wireless network at the Rice Campus. According to Dennis Hasenfang, undergraduate student in Information Technology and Management at IIT, our classroom education gave us real-world experience, not usually available in an academic environment. We were given the opportunity to manage the entire IIT wireless network and create a system that connects students to the Internet seamlessly.

The group was also fortunate to have Hasenfang, a member that worked for a company that could help: U.S. Robotics. The Schaumburg-based company donated the wireless technology equipment needed, while the students made the installation possible. The students coordinated the donation of five U.S. Robotics 802.11g Wireless Turbo Multi-Function Access Points and oversaw the installation and programming to make it compatible with IIT's network. After receiving the equipment, the students installed, programmed, and tested the network to ensure that the entire campus was covered by the 802.11b (Wi-Fi) and new 802.11g standards.

To ensure security of the system, Hasenfang, Willis, and McClone innovated a way to integrate the wireless network with IIT's database of student's. Thus, improving access DHCP security by limiting network access only to members of the IIT community.

As a result of this donation, students who check e-mail and surf the Web are no longer tying up the limited number of lab computers, said Ray Trygstad, director of information technology for the Center for Professional Development at IIT. The ability to provide power to the wireless access points through U.S. Robotics gave us enormous flexibility in where and how they should be installed. Thanks to dedicated students, the wireless network is completely operational at IIT's Rice Campus.

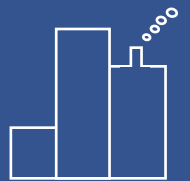
### Networks



### Wireless



### Industry



### Users



Illinois Institute  
of Technology

