



Photo credit: Steve Johnson

Ferris' CNS Program Goes Coastal

Computer Networks and Systems students get quirky

Students in associate professor Keith Jewett's Network Theory and Test course are shuttling across the hallway in the fourth floor of the Swan Building, which for the moment is the fastest way to get from New York to L.A.

"When I set the lab up, each row of student workstations represents a separate company," says Jewett. "Then, I divide each company into 'East Coast' and 'West Coast' segments." Based on these assignments, students move to lab rooms on opposite sides of the hallway and work building Unix/Linux and Microsoft servers that simulate networks between "East Coast" and "West Coast" locations.

An expert in the Unix operating system, as well as local and wide-area networking, Jewett carefully simulates the network environment and service demands that his Computer Networks and Systems students will encounter in the workplace.

"We stress the network and then see what we have to do to 'un-stress' it," explains CNS program senior Aaron White of Detroit. Over the course of the semester, students learn what it takes to operate the networks that allow organizations to share data among work sites.

"You get to deal with the inner workings, discover the internal commands to make the devices do different things like remote Web access, which can remotely turn the power on or off, and we encounter a lot of quirks that we're not used to, and those are interesting to overcome," White says. "I'd rather learn something like that here, where I have time, and we can learn as a group and discover how to get things to work the right way."

Many CNS program students such as White average 10 hours per week of lab time, even though only three hours per week are required. He and Jewett explain that the intensity and focus of students' voluntary computing and study sessions in the lab is emblematic of

whole classes' dedication to their projects. One night, Jewett left the lab at 10 p.m. and returned twelve hours later only to find a student in the same clothes and seat as when he left.

"Even if you don't have a deadline, you're so immersed and so happy to be learning something that you'll be able to apply to your career, you just want to keep going," explains White. "Why not learn something that you're definitely going to do later on? And you get to actually see the benefits of it right here and now — maybe even brag about how something works to the students in the other rows."

Such enthusiasm gave rise to an all-out celebration in Jewett's Network Theory and Test class when a donation of state-of-the-art servers arrived in Fall 2010.

"When we got the boxes, it was like Christmas," says Jewett. "The students brought them out on the floor, got it all unboxed and unwrapped, and figured out how to use it, all on a day that they didn't even have class."

The ultra-fast devices better simulate the networking systems that students are learning to develop and manage — abilities increasingly in demand in today's business world.

"We're talking about a difference between hours and minutes in speed," explains Jewett.

The hands-on experience with networks that operate at such speeds is critical to students' success after graduation.

"Recently, I've been looking for internships, and a lot of applications are looking for some experience," says White. "Our equipment and simulations are so close to what we find in actual workplaces that we get real-life experience and can build our confidence — I guess that's the best part."