ekahau
Wi-Fi Design

Case Study:
University of Colorado and Ekahau team up to train wireless engineers

As mobile communications are increasingly ubiquitous in our day-to-day lives, the wireless telecom industry will continue to demand highly technical professionals who understand the challenges of deploying wireless solutions for mission critical applications. The University of Colorado Boulder recognized this need and has one of the first programs in the nation to build a degree to meet the needs of the telecom industry.

The University of Colorado Boulder (CU Boulder) is located at the foot of the Rocky Mountains and has a reputation for excellence in research, hands-on learning, creative work and teaching practices across 150 academic fields. The Wireless Networking degree track is a part of the Interdisciplinary Telecom program (ITP) at CU Boulder specializing in Wireless LANs and LTE domains. Approximately 60-70 students graduate annually from the combined Masters and PhD program.

SUMMARY

The Interdisciplinary Telecom program (ITP) at University of Colorado Boulder trains future wireless professionals.

The Wireless Networking degree track, a part of the ITP, has a special focus on Wireless LANs and LTE domains.

Ekahau Site Survey and Planner is a key component in the wireless curriculum, helping further improve the course content and grow the program.

Students doing an outdoor site survey lab using Ekahau on the CU Campus.

Ekahau is a core component in the wireless curriculum

ITP strives to maintain close contact with industry experts. By using professional grade software in the classroom, students are equipped with skills using one of the industry leading Wi-Fi design solutions before entering the workforce. Ekahau Wi-Fi Site Survey and Planner was one of the wireless tools recommended by ITP student employers, which prompted ITP to add it into the Wireless Networking degree track two years ago. Ekahau competencies help further improve the course content and grow the program.

"As Wi-Fi networks in businesses are transitioning from best effort access to mission-critical, the industry urgently needs more highly skilled engineers. We are delighted to work with top-notch education institutions such as the University of Colorado to address the growing shortage of engineers who understand that "just add another access point" is no longer a solution to Wi-Fi bandwidth problems", said Jussi Kiviniemi, VP of Ekahau.

ITP specializes in industry specific hands-on training where, on average, students spends up to one year in a lab environment encountering various scenarios of wireless network deployment. Students use Ekahau Site Survey and Planner to design a solution, deploy the network using real components, and then validate the outcome.

Jose Santos, Senior Instructor at CU-Boulder, noted: "Our goal in the wireless lab course is to give students experience with state-of-the-art equipment. Students need to understand how wireless signals propagate both inside and in outdoor environments. With the support of high quality tools, our PhD students can focus on solving complex problems that limit the network performance and challenge the industry. We included Ekahau, because we found it easy to use, yet it is feature rich and cost effective. "

One recent graduate of ITP noted: "The best part about the (ITP) program is that most of the courses are hands-on. I know of very few universities in the same league that are structured this way. Most universities only cover the theory...and this makes ITP stand out both academically and in practice when we work at various companies."

In addition to Ekahau, the wireless curriculum includes OmniPeek for packet analysis and EDX Wireless for LTE.

About ITP at University of Colorado Boulder:
ITP has successfully engaged industry for more than 30 years and is one of the first programs in the nation to build a degree solely oriented for the needs of the telecom industry. The program combines technical courses on state-of-the-art telecom technologies with courses addressing the unique aspects of network economics, business concepts, and policy describing the regulatory and policy environment which define how telecom technologies are deployed and used. This blend of coursework defines the unique, interdisciplinary curriculum of ITP that provides students the opportunity to capture the "big picture" and to better understand the strategically important trajectory of change in this field.

Visit us at http://www.colorado.edu/itp/

> "Our goal in the wireless lab course is to give students experience with state-of-the-art equipment. We included Ekahau, because we found it easy to use, yet feature rich and cost effective."
>
> Jose Santos
> Senior Instructor, CU-Boulder