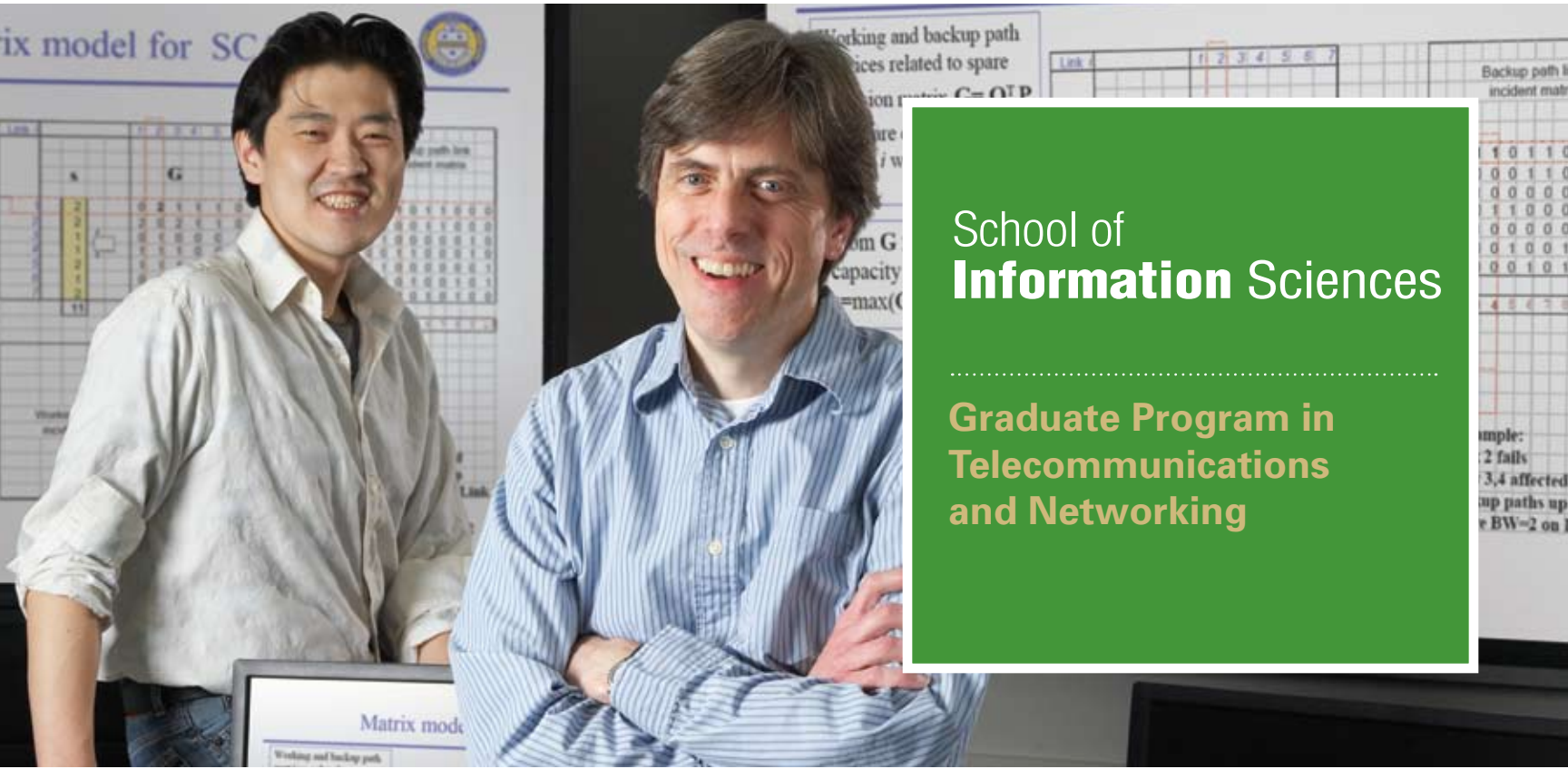


School of
Information Sciences

Graduate Program in Telecommunications and Networking

Why Telecommunications and Networking?

The future of telecommunications lies in unified communication systems that call for increasingly sophisticated network infrastructures. These network infrastructures bring functional challenges in network security and must support a wave of diverse applications including Voice over Internet Protocol (VoIP), streaming audio and video, and distributed computing. Thanks to a world-class research program and a course of study that combines theory and applied experience, the *i*School at Pitt is well positioned at the forefront of education in telecommunications and networking.

Martin Weiss, associate dean and associate professor

Our state-of-the-art laboratories and emphasis on practical applications of classroom studies give students the tools they will need to manage, design, and build network systems in high-level, high-demand careers. Students can take complementary courses in Web services or business—crafting the appropriate skill set for career success.

The U.S. Bureau of Labor Statistics projects that jobs in network systems/data communication analysis will increase more than ***53 percent*** over the next decade.

Some typical job titles for graduates of our program include the following:

- Network analyst
- Telecommunications analyst
- Communications analyst
- Network administrator
- Systems engineer
- Security officer
- Research and development engineer
- Customer support engineer
- Network engineer
- Manager of network engineering

Because the field is heavily influenced by the globalization of networks, the program also stresses teamwork with both domestic and international partners. A student might work simultaneously on a project with colleagues from other universities or other countries. For example, we have offered a class that is team-taught between Beijing, China, and the United States, mirroring what program graduates will experience in the marketplace.

Gaining experience and confidence working with team members outside the students' time zone, continent, and culture helps to set our alumni apart from those of other programs. In fact, the Pitt telecommunications program is so strong that the University is now exporting its model to nations such as Kosovo, where the *i*School at Pitt won a U.S. Agency for International Development grant to design a graduate telecommunications program at the University of Prishtina.

Graduate Program in Telecommunications and Networking

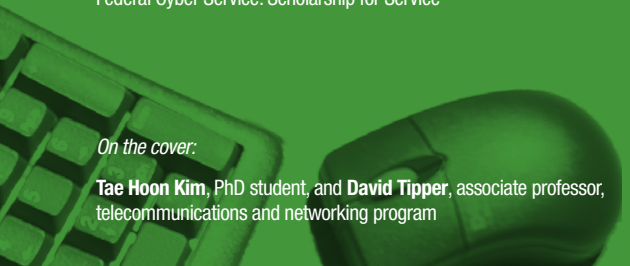
at the *i*School at the University of Pittsburgh

Cedric Pinder, MST student, recipient of the Federal Cyber Service: Scholarship for Service

As the proliferation of information networks brings our world closer together, there is an increased need for professionals who can imagine the future of telecommunications and networking.

Today, the field of telecommunications makes it possible for hospitals to share critical medical knowledge and sensitive patient information securely. It allows global financial markets to function and corporate networks to support some of the best-known names among world business leaders.

The potential for telecommunications and networking professionals seems virtually limitless. In the Graduate Program in Telecommunications and Networking, we educate the people whose research, technical skills, and innovation will shape the future of the field and the many industries it touches.



On the cover:

Tae Hoon Kim, PhD student, and **David Tipper**, associate professor, telecommunications and networking program

Telecommunications and Networking

The telecommunications field is growing exponentially. With each new phase of growth comes a shift in the associated career landscape. The *i*School at Pitt understands the changing nature of our discipline; that's why we give our graduates the broader skill sets they will need to evolve with and, in fact, shape the telecommunications field throughout their professional lifetimes. You can earn a Master of Science in Telecommunications, Certificate of Advanced Study, or PhD in telecommunications and networking.

Aylin Aksu, PhD student

Our program teaches about the physical technology and enabling processes, systems that provide cellular telephony, wireless local area networks (LANs), sensor networks, and mobile applications. In addition to master's-level graduates who work for wireless carriers, manufacturers, and other organizations as systems engineers and wireless network designers, we also produce PhD graduates who teach in universities worldwide.

Representative employers include the following:

- British Telecommunications
- Cisco Systems, Inc.
- University of Colorado
- CONSOL Energy Inc.
- Deloitte
- ECI Telecommunications
- Eli Lilly and Company
- General Electric Company
- Juniper Networks, Inc.
- Northeastern University
- PPG Industries
- QUALCOMM Incorporated
- Siemens Corporation
- Sony Ericsson Mobile Communications
- U.S. Steel
- UPMC
- Verizon

Much of our research is funded by prestigious organizations such as the National Science Foundation, Army Research Office, and U.S. Department of Defense. The PhD program in particular provides the opportunity for an academically rigorous course of study. Students display superior scholarship and mastery of their specialized field. They conceive, write, and defend PhD dissertations representing significant, original contributions to current academic research.

About the University of Pittsburgh

The University of Pittsburgh ranks in the uppermost tier of U.S. public research universities, according to *The Top American Research Universities* annual report. Today, as an elected member of the prestigious Association of American Universities, the University of Pittsburgh claims its place among the top public research universities in the nation.

The *i*School at Pitt

The University of Pittsburgh School of Information Sciences is a member of the *i*Schools Caucus, a consortium of 21 institutions of higher education that offer degrees in the information sciences and are interested in the relationship among information, technology, and people. Visit **www.ischools.org** for more information.

Admission

Applications can be submitted online through our Web site, **www.ischool.pitt.edu**. There, you also will find links to further information about the application process, deadlines, cost, and funding opportunities.

Financial Aid

A variety of financial aid options, including graduate student assistant and research positions, are available to students in the telecommunications and networking program.

Prashant Krishnamurthy, associate professor, and **Thaier Hayajneh**, PhD student

www.ischool.pitt.edu

Contact Us

We invite you to contact us for more information about what the Graduate Program in Telecommunications and Networking can offer you.

Advisors are available online or in person to answer your questions about the program of study, career options in telecommunications and networking, and more. We host regular information sessions on campus and chat sessions online. Visit **www.ischool.pitt.edu/news/learn-more.php** for details.

If you would like to schedule a visit, please contact our student recruitment coordinator at **teleinq@sis.pitt.edu**, **412-624-3988**, or **1-800-672-9435**.

University of Pittsburgh

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