



Kamin Whitehouse, assistant professor of computer science and principal investigator for the NSF grant, is shown with a hand-held device displaying occupant activities.

U.Va. Engineers Lead \$2 Million NSF Grant to Design 'Smart Building' Energy Systems

The researchers will focus on reducing energy used by buildings' HVAC systems. They will develop sensors and user interfaces that will allow for better control of temperature and enable buildings to better sense and automatically respond to occupants. The team will also be designing new HVAC equipment and building envelopes to improve the speed and efficiency with which buildings could respond to occupants.

The upcoming Rice Hall Information Technology Engineering Building will serve as a "living laboratory" for these technologies.

NSF Grant to Facilitate Creation of Smarter Buildings

U.Va. researchers have been awarded a \$2 million NSF grant to conduct “smart building” research. Their efforts will draw on the expertise of faculty and students from the U.Va. Engineering School’s Departments of Computer Science, Mechanical and Aerospace Engineering, and Systems and Information Engineering, as well as those from U.Va.’s School of Architecture and Darden School of Business.

Rice Hall — the U.Va. Engineering School’s upcoming Information Technology Engineering Building — will serve as one of the test sites for the systems. Trane will be donating advanced HVAC systems for the building, and the NSF grant will allow researchers to develop, test and optimize sensors and instrumentation in the building.

Rice Hall will open in fall 2011.




The upcoming Rice Hall Information Technology Engineering Building



University of Virginia
Office of the Dean
School of Engineering and Applied Science
P.O. Box 400246
Charlottesville, VA 22904-4246

Non-Profit Org.
US Postage
PAID
Charlottesville, VA
Permit No. 164

 **Visit Us Online:** www.seas.virginia.edu | smarthome.cs.virginia.edu
www.seas.virginia.edu/ricehall



DEVELOPING LEADERS of INNOVATION