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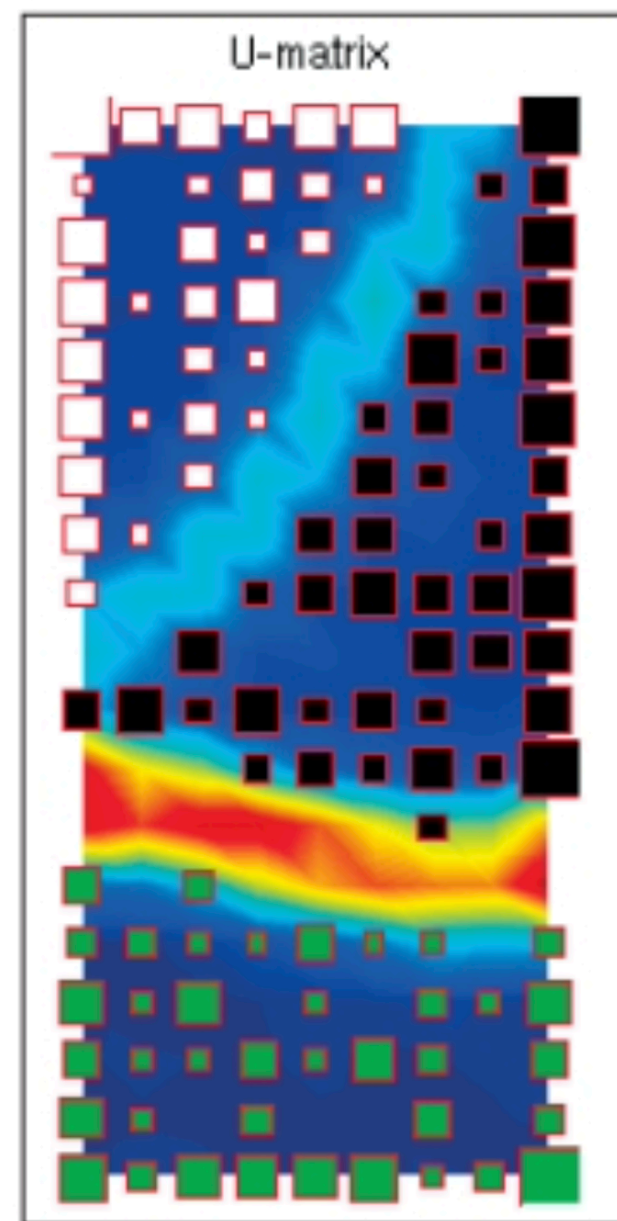
NEW GRANT FOR INTELLIGENT BUILDINGS PROJECT

BY JOYCE XI

Yale's Intelligent Buildings Project has received a \$200,000 grant from the Wells Fargo Foundation to conduct research on building energy consumption. The grant will aid the project's efforts to lay the foundations for significant energy conservation in existing and future building systems.

Founded in September 2010 as a collaborative effort between Yale's School of Engineering and Applied Sciences, School of Architecture, and Climate and Energy Institute, the Intelligent Building Project aims to create methods that more precisely monitor and handle energy usage in buildings, ultimately allowing for systematic reduction of waste. The project integrates engineering research on advanced analytical and sensing capabilities with architectural characterization of building functionality to create more specific and targeted measurements of consumption.

The project stresses the importance of avoiding inefficiency and prioritizing energy distribu-



Online classification of building electricity consumption based on building usage patterns
Courtesy of Professor Savvides

tion within buildings. According to Dr. Andreas Savvides, Professor of Electrical Engineering and Computer Science and a head of the project, "Just as important as the efficient production of energy, is the intelligent management of it."

With the grant, the project hopes to investigate new technologies that take into consideration the behavior of building occupants to achieve high levels of energy efficiency. Researchers have been developing and testing intelligent sensor prototypes that analyze building performance across many subsystems and energy usage areas in buildings. With this sensing, they hope to replace coarse existing metrics used to analyze building energy performance with new ones that also capture occupant related factors, and also identify the the relative contribution of building features and systems in the performance numbers.