



News & Events

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Clarkson University Professor Lei Wu Receives \$400,000 NSF CAREER Award for Smart Grid Research

Wind, solar and other forms of renewable energy are volatile and uncertain, a problem Clarkson University Assistant Professor Lei Wu is looking to solve.

The National Science Foundation has given Wu a \$400,000 Faculty Early Career Development (CAREER) award for “Smart Grid” research. Wu is embarking on a five-year project that will provide a blueprint as the United States updates its electrical grid in the 21st century.

He will develop mathematical models and algorithms in order to find favorable sites for renewable energy facilities that will enhance the United States’ “Smart Grid.” The CAREER grant project will launch this September 1 and continue through August of 2018.

The research will give power system operators and power companies more information to make better decisions, Wu said. The research will also hopefully reduce the unpredictability and variability sometimes associated with renewable energy projects, thus making them more feasible and widespread.

“We need some more rigorous research,” Wu said. “We’re trying to respond to some of the targets set by the government.”

The grant will fund two Ph.D students who will work with Wu on the project. Those students may travel to local high schools over the course of the grant to teach power systems concepts to students.

Wu, an assistant professor of electrical and computer engineering, has more than 10 years of experience in energy and power systems research. He has served as a consultant with the New York Independent System Operators organization to review their business management system and Energy Management System for power market operation in New York State. He will collaborate with NYISO and the New York Smart Grid Consortium on the research.

In 2012, Wu received a Smart Planet Award from IBM to develop coursework based on his research of the



future power grid to educate the next generation of industry leaders to use the technology.

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[A photograph for media use is available at <http://www.clarkson.edu/news/photos/lwu2.jpg> .]

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