

IEEE Miami Section, IAS DLP Lecture Announcement

"Enabling Cyber-Power Grid Resilience"

January 12th, 2024 | 11:00 AM to 1:00 PM

Location: Engineering Center 10555 W Flagler St, EC-2300, Miami, Florida 33174

<https://fiu.zoom.us/j/96283994681?pwd=TDBnVTVOcUJNWnJhV0syV3Z6dkhmUT09>



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Summary: During cyber events, keeping the power on to critical facilities such as hospitals and fire department is essential. A number of resources are available with the integration of distributed energy resources (DER) to help improve the resiliency of the critical loads during adverse events in a power grid. DER's are also being connected as Internet of Things (IoTs) Minimizing the impact of cyber-attack on the grid depends on one of these key factors: a) planning for cyber defense, b) training of human operators and employee, and c) metric-driven control and operational decisions. A formal metrics is needed to quantify the cyber resiliency of the electric grid and how to use that for operational cyber-resilience considering IoT devices. This talk will cover the basics of cyber-power resiliency, tools for operational decision, and a testbed to validate cyber-resilience tools for the electric grid.

Speaker Bio: Anurag K. Srivastava is a Raymond J. Lane Professor and Chairperson of the Computer Science and Electrical Engineering Department at the West Virginia University. He is also an adjunct professor at the Washington State University and senior scientist at the Pacific Northwest National Lab. He received his Ph.D. degree in electrical engineering from the Illinois Institute of Technology in 2005. His research interest includes data-driven algorithms for power system operation and control including cyber-resiliency analysis. Dr. Srivastava high impact research projects resulted in tools installed at the utility control center supported for more than \$60M by US Department of Energy, National Science Foundation, Siemens Corporate Research, Electric Power Research Institute, Schweitzer Engineering Lab, Power System Engineering Research Center, Office of Naval Research and several National Labs. In past years, he has worked in a different capacity at the Réseau de transport d'électricité in France; RWTH Aachen University in Germany; PEAK Reliability Coordinator, Idaho National Laboratory, PJM Interconnection, Schweitzer Engineering Lab (SEL), GE Grid Solutions, Massachusetts Institute of Technology and Mississippi State University. He has delivered 35+ keynotes/ tutorials/ IEEE distinguished lecture in more than 18 countries. He is an IEEE Fellow, member of several CIGRE WG and the author of more than 370 technical publications, 3 books and 3 patents.

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