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Dr. Weckman is currently an associate professor in Industrial and Systems Engineering at Ohio University. He obtained his PhD in Industrial Engineering from the University of Cincinnati, Cincinnati, Ohio. He has also practiced industrial engineering for over 12 years at such firms as General Electric Aircraft Engines, Kenner Products and The Trane Company. During his varied career, he has had a number of different technical responsibilities which involved developing and implementing various decision support and forecasting systems and techniques.

Dr. Weckman's primary research focus has been multidisciplinary applications utilizing knowledge extraction techniques with artificial neural networks (ANN). He has used ANNs to model complex systems such as large scale telecommunication network reliability, ecological relationships, stock market behavior and industrial process scheduling. In addition, his research includes Decision Support and Intelligent Systems, Nonlinear Modeling and Optimization, Sports Modeling, Forecasting, Reliability Analysis, and Industrial Safety and Health applications. His research has appeared in numerous journals and conferences.

His research in Telecommunications with Andy Snow (IARIA Fellow) uses computer simulation and artificial intelligence to introduce a new approach to measure dependability of wireless networks. The new approach is based on the development of an artificial neural network (NN), which is trained to investigate reliability attributes of a wireless network. Component mean time to failure (MTTF) is used to model reliability, while mean time to restore (MTR) is used for maintainability. The output from the simulation model is used to train the neural network. The NN is used to gain insights not easily apparent from simulation results. Lastly, a variety of reliability/maintainability growth and deterioration scenarios is analyzed with the NN.

In addition to being a member of Institute of Electrical and Electronics Engineers (IEEE), he has been recognized by the following: University of Louisville: Professional Award in Engineering IN 2007, Ohio University: 2006 and 2007 Marvin E and Ann D. White Research Award, General Electric Aircraft Engines: Airfoils Manufacturing - Outstanding Achievement, University of Cincinnati: Finalist in the 1996 Graduate Assistant Teaching Award, University of Louisville: Outstanding Senior Award and has been elected to the Tau Beta Pi and Alpha Pi Mu Honor Societies.

He has supported IARIA for a number of years and has produced and presented articles for the ICN/ICONS conferences. He has also actively presented tutorials, coordinated work group meetings and is a paper reviewer for the conference.