



Yaoyu Li

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Yaoyu Li grew up in Hohhot, Inner Mongolia in China. He received his B.Sc. degree in mechatronics in 1992 from Tsinghua University in Beijing, China, his M.Sc. degree in agricultural engineering in 1997 from University of Saskatchewan in Canada, and his Ph.D. degree in mechanical engineering from Purdue University in 2004. From 2004 to 2010, Dr. Li was assistant professor in the Department of Mechanical Engineering at University of Wisconsin – Milwaukee, and since August 2010, he has been an associate professor. From June 2011, he will be an associate professor in the Department of Mechanical Engineering at University of Texas at Dallas.

With background in mechatronics, controls and energy systems, Dr. Li has research interests in control, optimization, dynamic modeling and fault diagnosis for mechanical and electro-mechanical systems, with strong emphasis on energy systems. His recent research activities have been focused on energy efficiency and renewable energy systems, including

- Dynamic modeling and controls for building HVAC systems
- Wind turbine control for energy capture, load reduction and power quality
- MPPT control and integrated diagnostics for photovoltaic systems
- Power management and battery health monitoring for plug-in hybrid and electric vehicles
- Energy management and control for smart buildings, smart grid and microgrid systems
- Fault diagnosis for wind turbine drive-train

Dr. Li's research has received extensive industrial collaboration, including Johnson Controls, We Energies, Honda, Eaton, Rockwell Automation and Milwaukee Journal & Sentinel. He has been consultant to Johnson Controls Building Efficiency Research Group and Eaton Innovation Center. His technical contribution has led to more than 60 journal and conference publications, 6 US or international patents, and 5 technical reports to industry. Dr. Li received the 2007 Honda Initiation Grant Award for the work on Trip Based Optimal Power Management for Plug-in Hybrid Electric Vehicles.

Dr. Li is member of ASME, IEEE, ASHRAE, SAE and AIAA. He was the publication chair of 2010 IEEE/ASME Conference on Advanced Intelligent Mechatronics (AIM'10), and associate editor of the Proceedings of 2008 ASME Dynamic Systems and Control Conference.