Unlocking the Value of Internet of Things Via Cognitive Computing

When: Monday, November 13, 2017 6:00 p.m. – 7:30 p.m.

Where: Penn State Behrend, 180 Burke

Liang Downey

Business Development Executive for IBM's New Energy and Environment Group

Liang Downey is part of the IBM's Global Energy, Environment & Utility Industry team. She spearheads emerging solutions built on the IoT and Big Data to better balance the distributed energy supply and demand, eliminate energy waste and protect our environment. She is responsible for IoT sensor eco system development. She was with IBM's Pervasive Computing group, implementing wireless, mobile and RFID solutions. For 5 years at a microgrid start up, she helped the company grow, from business strategy, partnership to licensing company's IP.

Liang is an elected Adcom member for IEEE TEMS 2016-19. She is Region 4 WIE Chair. Liang was one of the founding members of the IEEE Humanitarian Technology Challenge (HTC) in 2009 to focus on electricity access for "people without power". HTC has since evolved into the award winning IEEE Smart Village initiative today. The most recent smart village story to deploy solar panels at the Himalayan temples was featured by the National Geographic TV at its Breakthrough program on June 6th 2017.

Abstract

- IoT creates a huge amount of data, but 90% of the data are in the dark. This presentation reviews the evolution of smart sensors/actuators to today's IoT, discusses how to unlock the value of IoT, then explains the concept of Cognitive Computing and how it differs from machine learning and artificial intelligence.

- Cognitive-based systems are unique in their ability to make sense of all kinds of data to build knowledge and provide confidence-weighted actions. This capability is critical to build the new digital future that is more distributed, flexible, efficient and sustainable.

- The presentation will end with a few industry samples/application cases including air quality forecast/controls, energy trading based on Blockchain, engineering knowledge management and cognitive energy efficiency diagnoser.

SCHEDULE OF EVENT
5:30 – 6:15 p.m. Reception
6:15 – 7:15 p.m. Presentation
7:15 – 7:30 p.m. Q&A Session

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