

Symposium Speakers – Smart Home Platform and Sensing



Victoria Chen

**George & Elizabeth
Pickett Professor**

**The University of Texas
(UT) at Arlington**

Designing and Controlling a System of Electric Vehicle Charging Stations

Victoria Chen is Professor of Industrial, Manufacturing, & Systems Engineering at UT at Arlington. She earned a B.S. in Mathematical Sciences from The Johns Hopkins University, and M.S. and Ph.D. in Operations Research & Industrial Engineering from Cornell University. She co-founded the Center on Stochastic Modeling, Optimization, & Statistics in 2008 and served as Director until 2012. In 2012-14, she served as Interim Department Chair, and since 2014, she has served as Director of Faculty & Student Research Development. Her research utilizes statistical perspectives to create new decision-making methodologies that accommodate the uncertainty and complexity of real world problems.

Abstract:

The future of electric vehicle (EV) use in society will require development of a system of charging stations. The system design problem specifies the location of the stations and the capacity of battery storage and the number of charging slots for each station. The control problem addresses buying and selling of electricity to accommodate customer demand and maximize profit. The presentation will focus on data analytics, operations research methods, followed by a case study. This research was partially-funded by National Science Foundation grant EECS-1128871.



Jairaj Hedge

**Co-Founder and Vice
President**

Orchestra Technology

Internet of Things (IoT) Security Challenges

Jairaj Hedge, Co-Founder Orchestra Technology and currently serves as the Vice President of Technology. He is a software development veteran with over 25+ years of experience. He was CTO at JP mobile (acquired by Motorola) leading The Research and Development Division for all product lines. Jairaj has served as the Director of Software Engineering for The Motorola Good Technology Group where he managed all new software releases for device security and management; secure data access and secure messaging. Jairaj holds a B.S. degree in Electrical Engineering from IIT -Varanasi and a M.S. in Computer Science from ISI - Calcutta

Abstract:

The Internet of Things (IoT) represents a diverse technology and usage with unprecedented business opportunities and risks. Gartner predicts that there will be 26 billion installed units on IoT by 2020. With bullish forecasts and big promises, IoT security seems to be the biggest concern. Embedding sensors into everyday devices, and letting them record what we do, could pose a massive security risk. IoT has rapidly been developed without appropriate consideration of the profound security goals and challenges involved. This presentation will outline the key challenges for IoT future and heightened security risks.

Smart Home as a Business, for Real?



Mitch Tseng, Ph.D.

Managing Member

Tseng InfoServ, LLC

Dr. Mitch Tseng is a veteran in the international in communication standards community. He has been leading the development of various telecommunication standards in TIA, 3GPP2, and oneM2M for the past 20 years. His latest passion is to promote IoT Services, especially in the areas of Industrial IoT (IIoT), Vehicular Telematics (VT) and Home Domain. He has served leadership positions in many international industrial and standard forums. He is now the Chair of TIA Engineering Committee TR-48 (VT) and the Innovation Task Group of the Industrial Internet Consortium (IIC), and a Vice Chair of the Architecture WG in oneM2M. Dr. Tseng is a Life Member CIE/USA and a longtime contributor to the DFW Chapter.

Abstract:

In spite of many media-hypes, showcasing events, and heavy promotions of mature commercial products for Home Domain, the home owners seem still hesitate in turning their houses or apartments into Smart Homes. What may be the reasons preventing the Home Domain business from taking off? One of the reasons, not surprisingly, maybe because the industry has been erroneously treating the business as many of the conventional business we are accustomed to. How can we break away from those praxes and turn the things around?

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