

29th International
Conference on
VLSI Design



15th International
Conference on
Embedded Systems

January 4-8, 2016. KOLKATA, INDIA

Theme: **Technologies for a Safe and Inclusive World**

Conference Website: vlsidesignconference.org



Driving Unconventional Growth Through Industrial Internet of Things

Dr. Prith Banerjee

Executive Vice President, CTO, Schneider Electric

The Internet of Things is generally used to describe the impacts on consumers for example, the use of wearable to track our fitness and health. The Industrial Internet of Things describes a much bigger opportunity in terms of scope, scale and business impact. We define it as a universe of intelligent industrial products, processes and services that communicate with each other and with people over a global network. This talk will discuss the unprecedented growth potential we are seeing with the Industrial Internet of Things, which we and many others believe is not just a technology trend, but a technology revolution which will fundamentally change how industries operate. In this talk we will describe the market opportunity for IIOT, the technology drivers for IIOT, and the challenges and opportunities of IIOT. To fully realize the promise of the Industrial Internet, companies will need to excel at exploiting four technology capabilities: sensor - driven computing, industrial analytics, intelligent machine applications, and industrial control security. By deploying these capabilities, companies can weave together previously unavailable, or inaccessible, enterprise and machine - generated data to create new monetization opportunities. Sensors, analytics and intelligent machine applications, and the in - house or third - party sourced IIoT platform that will bind them together, will supplant the now separate worlds of information technology (IT) and operational technology (OT).

Biography: Prith Banerjee is Executive Vice President, Chief Technology Officer and member of the Executive Committee of Schneider Electric, reporting to the Chairman and CEO. In this role he is responsible for driving innovation and technology differentiation, and coordinating the R&D activities of the company across its five businesses with 11,000 R&D personnel, and a 1.2 billion Euro R&D investment.

Previously, he was Managing Director of Global Technology Research and Development at Accenture. Formerly, he was Chief Technology Officer and Executive Vice President of ABB, a power and automation company in Zurich, Switzerland. Earlier, he was Senior Vice President of Research at HP and Director of HP Labs. Formerly, he was Dean of the College of Engineering at the University of Illinois at Chicago. Formerly, he was the Walter P. Murphy Professor and Chairman of Electrical and Computer Engineering at Northwestern University. Prior to that, he was Professor of Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign. In 2000, he founded AccelChip, a developer of products for electronic design automation, which was sold to Xilinx Inc. in 2006. During 2005-2011, he was Founder, Chairman and Chief Scientist of BINACHIP Inc., a developer of products in electronic design automation. His research interests are in electronic design automation, and parallel computing, and he is the author of about 350 research papers in journals and conferences. He has also supervised 37 Ph.D. students. He currently serves on the Board of Directors of Cray, the Technical Advisory Board of Cypress, and the Steering Committee of the Industrial Internet Consortium. In the past, he has served on board for the Anita Borg Institute, the

Computer Science Board of the National Academy of Engineering, and the Technical Advisory Boards of Ambient, Atrienta and Calypto. He was listed in the FastCompany list of 100 top business leaders in 2009 and the Most Creative People in Business (MCP1000) in 2014. He is a Fellow of the AAAS, ACM and IEEE, and a recipient of the 1996 ASEE Terman Award and the 1987 NSF Presidential Young Investigator Award. He received a B.Tech. (President's Gold Medalist) in electronics engineering from the Indian Institute of Technology, Kharagpur, and an M.S. and Ph.D. in electrical engineering from the University of Illinois, Urbana.