## Joint Symposium eMDC-2017 & ISSM-2017

## Invited Speech: Al in Semiconductor Design and Manufacturing

of Competence



**Dr. Vijay Sankaran** *IBM Global Electronics SME, IBM Global Electronics Industry Center* 

## **About the Speaker**

Dr. Sankaran focuses on a portfolio of IBM solutions for Cognitive Manufacturing. Vijay has 20 years of experience on both sides of the aisle – as a business user as well as an IT leader. Prior to IBM, Vijay was a Managing Partner at a consulting firm focused on Big Data analytics . Before that he led defect detection tool development at International SEMATECH and later founded a software startup in Austin, TX. Vijay holds a doctorate in artificial intelligence for integrated manufacturing from Rensselaer Polytechnic Institute. His research was on high speed visual inspection technologies for electronics assemblies. He has authored "Inspection in Semiconductor Manufacturing" published in Wiley Encyclopedia of Electrical Engineering.

## **Abstract**

- Opening remarks
- Let us put a bounding box around AI
- Known usage of Machine Learning in Semiconductor Design and Manufacturing
- Exploratory angles with Deep Learning
- How our industry is unique in accelerating its own pace of innovation
- A futuristic vision for Semiconductor