

Digital Twins for Digital Transformation

Keynote Session C I

Date: Saturday, Dec 18, 2021

Time: 09:00 AM-09:55 AM

Speaker: Dr. Vinay Jammu, VP - Physical-Digital Technologies, GE Digital, India

Abstract:

Over the past few decades, dramatic improvements in communication and computing technologies have driven the growth of consumer internet which has improved efficiencies, increased customer base and created new business models in many industries including retail, banking, hospitality, and transportation. A confluence of these technologies is rapidly changing the landscape of what is possible in industrial internet area as well including power, transportation and healthcare industries by driving new outcomes and efficiencies that were not possible before. For example, 1% fuel saving in airline industry today is worth \$30B over the next 15 years in the industry.

This talk will focus on Digital Twin technologies GE is driving for Digital Transformation of industries to improve efficiencies of industrial assets by bringing together sensing, monitoring, control, prognostics and optimization. Digital Twins are living personalized learning models of different assets that assist in improved decision making related to operation and maintenance of these assets. For example, Digital Twins models of turbine system in GE90 engine are used to optimize maintenance saving tens of millions of dollars in unnecessary overhauls. In manufacturing, Digital Thread and Digital Twins are being connected to reduce cycle time and improve manufacturing productivity.