





We are pleased to invite you to the Webinar organized by

American Society of Civil Engineers-ISWR

Wednesday, Aug. 12, 2020 at 5.30 pm (India time) on MS Teams

ABC of Construction: Artificial
Intelligence and Digital Twins +BIM
+ Computer Vision
In Railway Projects

Click **HERE** to register for free **For more details contact:** +91 9820292081

EXPERT SPEAKER Dr. Mani Golparvar- Ph.D.

Associate Professor- University of Illinois at Urbana-Champaign CTO and co-founder of Reconstruct Inc.

Kindly login 10 min. before time. Participation E-Certificate would be issued to all bonafied participants.

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Dr. Tanuja Bandivadekar Head of Department MPSTME - MUMBAI Deoyani Joshi (Faculty Advisor)
Student Activities
MPSTME - MUMBAI

Er. Ravindrra J Ringshia

ME-Civil, USA (President, ASCE-ISWR)





Dr. Mani Golparvar is the CTO and co-founder of Reconstruct, a Software-as-a-Service company that integrates reality modeling, building information modeling (BIM) and project scheduling to visually track progress, analyze productivity, and proactively detect potential delays using predictive analytics; in turn empowering construction companies to keep their projects on schedule and on budget. Dr. Golparvar is also Associate Professor of Civil Engineering, Computer Science, and Technology Entrepreneurship at University of Illinois at Urbana-Champaign. His work in the area of computer vision, machine learning, and BIM has been the recipient of many awards including 2018 Walter Huber Research Prize from American Society of Civil Engineers (ASCE), 2017 National Top 20 Under 40 from ENR; 2016 Dan Halpin Award for Scholarship in Construction and 2013 James Croes Medal for innovation in Civil Engineering from ASCE; 2013 and 2010 CETI awards from FIATECH; and numerous best journal and conference paper awards. Reconstruct has also been recognized by several industrial awards such as Crunchbase's 50 hot tech companies globally in 2019, 2016 World Economic Forum most innovative startup company and 2016 Innovation Award from Turner Construction.

About the Webinar:

Today, many construction companies are striving to align the production efficiency with scheduled activities through the use of reality capture and Building Information Modeling (BIM)-enabled workflows. The exponential growth in data acquisition and application of BIM, paired with ever more aggressive delivery schedules, calls for introduction of solutions that transcend the current algorithmic capabilities and venture into Artificial Intelligence (AI) territory with the goal of achieving better control and higher level of predictability through the real time analysis of production, resources and jobsite conditions. This talk will present how leading construction companies in the US, Europe and Asia have leveraged Reconstruct -a new visual production management system- to achieve production efficiency on 100s of construction sites around the world. I will present how images and videos from drones, smartphones and 360-degree cameras are used together with computer vision algorithms to automatically generate 3D reality models over project timeline. I will also show how AI algorithms integrate and compare reality models with 4D BIM to track progress and productivity and identify risk for potential schedule delays. I will share insights on the underlying technology and work processes, and I will showcase the ongoing research and development that will pave the way for achieving real time analysis of production, resources and jobsite conditions.