## 筑波大学 University of Tsukuba

### EME International Seminar Series



# Human-Machine Interfaces enabling the Future of Engineering Work Prof. Fernando Moreu

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### **Abstract:**

Structural Health Monitoring (SHM) is designed to help decision-makers about structural safety. If inspectors would be able to access structural data related to safety or damage in the field directly, they could transform decisions in real-time. This presentation summarizes new work on SHM decisions exploring the concept of new human-machine interfaces associated with augmented reality. This presentation summarizes work in human-in-the-loop with application on real-time computer vision, robot enabled access to structural inspections, and new UAV structural inspection frameworks with practical applications in the field.

#### Bio:

Prior to his doctorate degree, Fernando Moreu worked in consulting engineering for over ten years, mostly focused in structural design and construction of bridges and structures. His exposure to both industry, design, and construction informs his research interests and publications. He stays active in domestic and international societies related to smart infrastructure design; maintenance and management of infrastructure policies; and structural sensing for safer and cost-effective assessment. <a href="http://smilab.unm.edu/">http://smilab.unm.edu/</a>

Thursday, June 22, 2023 2:00 pm – 3:00 pm