

## Huiming Yin, P.E., M.ASCE

### Vision Statement

My vision for serving the EMI Board of Governors (BoG) is to actively promote research and the application of scientific and mathematical principles in mechanics to address existing and emerging engineering and societal issues. This aligns well with the EMI mission to nurture generations of scholars, engineers, and educators. In this constantly changing world, with emerging fields such as artificial intelligence, metamaterials, digitalization, and extraterrestrial exploration, I firmly believe that Engineering Mechanics provides a foundation for understanding, predicting, and designing new systems, and that the EMI BoG can guide the growth and prosperity of the EMI Community.

Firstly, EMI must continue to serve as the pivotal center of engineering mechanics by providing an interdisciplinary forum for researchers, practicing engineers, students, public officials, and others. EMI Conferences have been the major avenue for my group to exchange cutting-edge research with colleagues. My students have grown in this community and received >10 awards in EMI Student Competitions. In addition, EMI, as the leading institution in engineering mechanics, plays a fundamental role in creating new opportunities for our community and supporting emerging research initiatives. Finally, the industry involvement is critical for the healthy growth of EMI communities. If elected as a member of EMI BoG, I will partner with other BoG members to increase the engagement of the different stakeholders to promote EMI for industry-university cooperation, and work with members from different disciplines, with particular attention to younger members and student members, to achieve EMI's mission and advance its vision.

### Short Bio

Dr. Huiming Yin received his PhD degree in Structures, Mechanics, and Materials from The University of Iowa in 2004. Before joining Columbia University as an Assistant Professor in 2008, Dr. Yin was employed by the California Department of Transportation (Caltrans) as a Civil Engineer in 2006-08 and by the University of Illinois at Urbana-Champaign (UIUC) as a Postdoctoral Research Scientist in 2004-06. As a professor in Columbia's Department of Civil Engineering and Engineering Mechanics, Dr. Yin pioneered the research of energy harvesting in civil infrastructure and received the National Science Foundation CAREER Award in 2010. He was promoted to Associate Professor in 2013 and is well recognized as a leader in the field of mechanics of modern structures and materials. He established the NSF Industry/University Cooperative Research Center (IUCRC) – Center for Energy Harvesting Materials and Systems (CEHMS) at the Columbia site. He has been registered as a Professional Engineer of Civil Engineering in California and New York.

As a researcher and scholar, Dr. Yin has authored >130 journal papers, including >10 published in the Journal of Engineering Mechanics (JEM). His recent work on singular-continuum (singum) was selected as the Editor's Choice of JEM. Dr. Yin has written 3 major books: "The Introduction to Micromechanics of Composite Materials", which has been used as a textbook in several universities; "Inclusion-based Boundary Element Method" and "Building Integrated Photovoltaic Thermal Systems: Fundamentals, Designs and Applications", which cover his

fundamental and applied research. Dr. Yin served as the Chair of the Modeling Inelasticity & Multiscale Behavior (MIMB) Committee from 2013 to 2015, and is currently the Chair of the Nanomechanics and Micromechanics Committee. He has been organizing technical sessions at various EMI Annual conferences, including the Minisymposium of Modeling of Multiphysics-Multiscale-Multifunctional (4M) of Engineering Materials and Structures for 11 consecutive years since 2016.