

Vision Statement – Alexandros Taflanidis

Over the past 17 years I have called EMI my academic home, and I have watched with excitement as our community has flourished and expanded. In fact, I was fortunate to begin my service to the EMI community when my career and the institute itself were both in their infancy. The manner in which this community has received and supported me from my earliest days as a mechanician has inspired my deep commitment to contribute in every way possible to EMI's continued success. Moreover, having grown up professionally with the institute, I have been able to see it from different vantages: as a student and eventually full member attending all EMI conferences since 2008, as a frequent mini-symposia organizer, as a conference co-chair for the 2012 EMI/PMC conference at the University of Notre Dame, and recently as a Board of Governors (BoG) member. Within its technical division, I have similarly served as a member of both the Probabilistic Methods Committee and the Dynamics Committee, as the organizer of the former's Student Paper Competition (2013-2017), a regular judge for that competition, and ultimately a member of the leadership team of that committee. I have also served as one of the guest editors for the *Journal of Engineering Mechanics* Special Collection on the EMI Conference Student Competition Finalist Papers, promoting the excellent work of the younger members of our community. I was one of the inaugural editors in 2021 and currently serve as the lead guest editor for the special collection. I was elected to the BoG in 2022, and I am currently finishing my first three-year term in this position, hoping to be re-elected for a second term.

This body of contributions to EMI, recognized by my receipt of the 2018 EMI Award for Excellence in Service, provides strong evidence of the servant leadership I now humbly want to continue. Over the past three years I have tried to use the BoG as a platform to further amplify my service to EMI and our vibrant community, and I am hoping I will be provided the opportunity to continue doing so. Beyond my standard duties as a liaison to a number of other committees, I am serving as the Chair of the EMI Conference Planning committee, assisting in the organization, and promoting our national and international conferences. If elected, I plan to focus my immediate efforts on creating new opportunities within these conferences for our community, recognizing that ongoing changes in the funding landscape in the U.S will have a significant impact, and will, most probably, disproportionally affect our young members (students and early-career professionals). Personally, early exposure to a welcoming EMI community vitally shaped my academic views and accelerated my professional trajectory. I am eager now to further help create the same opportunities for other early career mechanicians. I will prioritize creating new opportunities to engage early career mechanicians, establishing additional incentives/mechanisms for their participation in our conferences and new venues for exposure to the institute. I have tried to accomplish this over the year through student competitions, the *Journal of Engineering Mechanics* special collection and my involvement in initiatives for early-career members, but I feel that more needs to be done. One approach I plan to seek for achieving this objective, is to create a stronger connection between our annual conference and university campuses. I think such a campus experience within the conference can promote greater connections within our community, while potentially helping in reducing conference registration fees and accommodation costs. I hope to also renew exposure for the institute internationally, leveraging my personal contacts and collaborations with different research networks. The latter will be vital to telling the important story of EMI's contributions, including creating opportunities (and reasons) to attend our annual conferences, and cultivating new relationships that can maintain EMI's relevance in a rapidly evolving research landscape.

Bio – Alexandros Taflanidis

Dr. Alexandros Taflanidis is Professor in the Department of Civil and Environmental Engineering and Earth Sciences at the University of Notre Dame. He holds a concurrent position at the Department of Aerospace and Mechanical Engineering, and he is a fellow of the Kellogg Institute of International Studies, the Pulte Institute for Global Development, and the Fitzgerald Institute for Real Estate. He received his Bachelors (2002) and Masters (2003) in Civil Engineering from the Aristotle University of Thessaloniki, Greece. He got his PhD in Civil Engineering with a minor in Control and Dynamical Systems from the California Institute of Technology (2008). His research and teaching focus on uncertainty quantification and uncertainty-conscious analysis/design, with applications to dynamical system design, natural hazard risk mitigation, and sustainability/resilience of civil infrastructure systems. A special area of interest for his group is the integration of computational statistics techniques in coastal risk assessment and real-time emergency response management, developing practical tools to guide planning decisions of different stakeholders through partnerships with the Army Corps of Engineers, FEMA, NOAA and the NSF SimCenter (part of the Natural Hazard Engineering Research Infrastructure network). Dr. Taflanidis has also a strong interest in applications of engineering for international development, working with students to discover engineering innovations that empower vulnerable communities to build resilience to hazards, while training the next generation of global citizens.

He has been recognized with the 2021 Walter L. Huber Civil Engineering Research Prize, the 2018 EMI Award for Excellence in Service, the 2019 and 2014 Joyce C.S.C Awards for Excellence in Undergraduate Teaching, the 2020 Kellogg Institute for International Development Award for Excellence in Undergraduate Advising, and the 2014 NCEEES Award for best undergraduate project linking undergraduates to the professional practice. He is a member of the EMI Probabilistic Methods Committee and Dynamics Committee, and has served as the former's Chair. He is also a member of the editorial board of the ASCE Journal of Structural Engineering, the Journal of Uncertainty Quantification, Earthquake Engineering and Structural Dynamics, Structural Safety, and Reliability Engineering and System Safety. He was the inaugural co- guest-editor for the Journal of Engineering Mechanics Special Collection on the EMI Conference Student Competition Finalist Papers, serving currently as the lead guest editor. He has served in the EMI Board of Governors for the past three years and he has been the Chair of the EMI Conference Planning committee during the same period.