

## Service Statement

I have always strived to be a good scientific citizen for my department, my school and my research community. I truly believe serving students, colleagues and the broader research and academic community is an important duty that deserves time, effort, and commitment. Since joining Columbia, I have served as the academic advisor of about 5 master students each year, served as a member of a faculty search committee, a member of the graduate admissions committee of our department, an examiner for the PhD qualification exams and final defense of students in Civil Engineering and Engineering Mechanics, Computer Science, Applied Physics and Applied Mechanics, and Earth and Environmental Science. At the school and university level, I have served multiple times as reviewers for internal grants such as the SEAS SIRS and RISE programs. I am very grateful for the opportunities to serve others, as they provide me with valuable insights about my department, my school and Columbia university.

I have also served more than 20 times as a panelist and reviewer for US government funding agencies (Army Corps of Engineers, Army Research Laboratories, Army Research Office, Department of Energy, National Science Foundation) as well as foreign grant offices (e.g. European Union Liaison Office, Germany Science Foundation, Hong Kong Research Council) for projects ranging from \$100K to multi-million projects. I have also served as a PhD examinee or as an expert witness for masters and PhD defenses at universities in Italy, France and Germany. On top of these duties, I have also been a reviewer for more than 25 different top journals across disciplines, including the Computer Methods in Applied Mechanics and Engineering, Journal of Geophysical Research, Computational Mechanics, International Journal for Numerical Methods in Engineering and Finite Element Analysis and Design. In general, I try to serve as reviewer as often as my schedule allows, such that the amount of time investment I received from anonymous reviewers of my own publications can be justified by my corresponding contribution as a reviewer or editorial board member in the same journal. Meanwhile, as long as no conflict of interest exists, I accept all requests for grant proposal review from well-regarded agencies. My goal is to serve as an advocate for the exciting ideas and provide assessments on the potential of the proposed work or new findings in an unbiased manner.

I also strongly believe the importance of being in service to our research community. Therefore, I have organized more than 20 mini-symposia, workshops and conferences for the computational mechanics and geomechanics communities. In addition to mini-symposia on specific research topics, I have also worked with my colleague Christian Linder from Stanford and Leon Mishnaesky Jr. from Technical University of Denmark to organize a 3-day workshop on Multiphysics computational mechanics of advanced materials. With the support from the Danish Agency of Science, Technology and Innovation, we were able to invite many of the top researchers across the globe to deliver talks and exchange ideas. I have also chaired the local organizing committee of the World Congress of Computational Mechanics in the summer of 2018, where more than 100 mini-symposia were organized and presented for a week. I also successfully secured the funding from government agencies to support colleagues and graduate students from underrepresented groups to attend this world congress. During the WCCM week, I also proposed and organized a workshop on funding opportunities, which hosted program managers from Air Force, National Science Foundation, Sandia National Laboratories, National Institute of Science and Technology, National Institute of Health and US Army to provide an in-depth overview of their programs and funding opportunities to young scholars. My work at WCCM was noted by the Minerals, Meta and Materials Society and, as a result, I was again recruited to serve as the chair of the planning committee for a workshop called Verification and Validation of Computational Models Associated with the Mechanics of Material, which brings internationally recognized researchers and thought leaders together for a one-day workshop that leads to a final report available to the public in 2019. Finally, I am an active member of the ASCE Engineering Mechanics Institute (EMI), a part of the American Association of Civil Engineers (ASCE), where I serve as committee member of the Computational Mechanics, Poromechanics, Elasticity and Granular Mechanics Committees.