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4th National Conference on Multidisciplinary Design, Analysis and Optimization

INTERDISCIPLINARY DATA-DRIVEN DESIGN OF ENGINEERED MATERIALS SYSTEMS

Prof. Wei Chen
Northwestern University

6.30PM

Dr. Chen is the Director of the Integrated Design Automation Laboratory (IDEAL), Director of the Predictive Science & Engineering Design (PSED) Cluster, and Co-Director of the Design Cluster.

Her research goal is to develop rational and computationally efficient design methods based on data science, optimization, statistical inference, and decision analysis for use in engineering design and manufacturing problems. Her current research involves close collaborations with experts in mechanics, manufacturing, materials science & engineering, social science, and computer science. In addition to the listed interests, other topics include risk analysis, model validation and uncertainty quantification, robust shape and topology optimization, deep learning, network analysis, microstructure characterization & reconstruction, and certification of additive manufacturing models.

Dr. Chen is an elected member of US National Academy of Engineering (NAE). She is the President of International Society of Structural & Multidisciplinary Optimization (ISSMO) and Editor -in- Chief of ASME Journal of Mechanical Design.