Preface

Special Issue on Machine Learning for Scientific Computing

Machine learning has been gaining recognition rapidly as a powerful computational technique to address some of the most challenging problems arising from scientific and engineering computations (SEC) with promising results in simulations of biological and quantum systems, fluid dynamics, wave scattering, high dimensional PDEs, and inverse problems, etc. This special issue contains 1 survey paper and 17 original research articles on recent developments in machine learning, especially deep neural networks, concerning both its theoretical and algorithmic aspects pertinent to SEC.

Special Issue Editors:

Wei Cai
Southern Methodist University
Dallas, Texas, USA

Weinan E
Princeton University
Princeton, New Jersey, USA