

FLORIDA STATE UNIVERSITY  
COLLEGE OF ARTS AND SCIENCES

COMPUTATIONAL METHODS FOR ESTIMATING GLOBAL SENSITIVITY INDICES AND  
SHAPLEY VALUES

By  
HUI DUAN

A Dissertation submitted to the  
Department of Mathematics  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

2023

Hui Duan defended this dissertation on June 12, 2023.

The members of the supervisory committee were:

Giray Ökten

Professor Directing Candidancy

Xiuwen Liu

University Representative

Lingjiong Zhu

Committee Member

Feng Bao

Committee Member

The Graduate School has verified and approved the above-named committee members, and certifies that the dissertation has been approved in accordance with university requirements.