FLORIDA STATE UNIVERSITY

COLLEGE OF ARTS AND SCIENCES

BAYESIAN VARIABLE SELECTION FOR NON-GAUSSIAN DATA USING GLOBAL-LOCAL

SHRINKAGE PRIORS AND THE MULTIVARAITE LOGIT-BETA DISTRIBUTION

By

HONGYU WU

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

2022

Hongyu Wu defended this dissertation on November 4, 2022.

The members of the supervisory committee were:

Jonathan R. Bradley

Professor Directing Dissertation

Bryan Quaife

University Representative

Xin Zhang

Committee Member

Andres Barrientos

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.