

Sudan University of Science and Technology

College of Graduate Studies

HYBRID ENSEMBLE APPROACHES TO CLASSIFY IMBALANCED DATA

طرق المجاميع الهجينة لتصنيف البيانات غير المتوازنة

Thesis Submitted in Partial Fulfillment of Requirements for the Degree of PHD in Computer Science

Prepared by:

Supervised by:

Shaza Merghani Abd Elrahman Fadel Elmola

Prof. Dr. Ajith Abraham

Feb 2016