

**DES SECURITY ENHANCEMENT USING  
GENETIC ALGORITHM**

تحسين أمن خوارزمية التشفير القياسية باستخدام

الخوارزمية الجينية

**Sudan University of Science & Technology  
College of Graduate of Studies**

A thesis submitted In Partial Fulfillment of The Requirements  
For the Degree of Master in Computer Science

BY:

**AYMEN ELSADIG MOHAMMED**

Supervisor:

**Dr. Faisal Mohammed Abdalla Ali**

May 2014

بسم الله الرحمن الرحيم

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Prepared by: AYMEN ELSADIG MOHAMMED

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### Approval Page

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Thesis title: Data Encryption Standard (DES)  
Security Enhancement Using Genetic  
Algorithm

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# الآية

بسم الله الرحمن الرحيم

(وَ اتَّقُوا اللَّهَ وَيُعَلِّمُكُمُ اللَّهُ وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ)

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صدق الله العظيم