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(أَمَّنْ هُوَ قَانِتٌ آنَاءَ اللَّيْلِ سَاجِدًا  
وَقَائِمًا يَحْذَرُ الْآخِرَةَ وَيَرْجُو رَحْمَةَ  
رَبِّهِ قُلْ هَلْ يَسْتَوِي الَّذِينَ يَعْلَمُونَ  
وَالَّذِينَ لَا يَعْلَمُونَ إِنَّمَا يَتَذَكَّرُ أُولُوا  
الْأَلْبَابِ).

صدق الله العظيم ،،

الزمر - الآية (9) .

# ***Dedication***

*This Thesis is dedicated to my lovely  
    ,parents  
My brothers, sister and friends,  
    With love and gratitude*

## ACKNOWLEDGEMENTS

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## **ABSTRACT**

In today's global economy, information awareness is an essential component of any **management of information system**. Furthermore, the importance of information awareness is even more vital in universities. Like other organizations, universities provide users with access to a huge amount of information and resources. As such, it is very important for employees and students to be aware of ethical issues associated with the usage of these information resources. Lack of an effective code of conduct and policies forces us to address the field of computer ethics and think about new ways to solve the problems of the presented issues.

This research addresses some of the most important and controversial issues including ethical and legal matters such as computer crime, computer sabotage, hacking, privacy, intellectual property, copyright and software piracy.

This research investigates the ethical awareness of computer use in the West Campus of Sudan University of Science and Technology (SUST). The study attempts to find the differences between males and females in their ethical judgments and the factors that affect their ethical judgments. A questionnaire based on the ten codes of ethics and consisting of 20 questions was distributed to the study participants, which consisted of the employee's computer based in the West Campus of SUST. 102 volunteers participated in the survey (response rate 85%).

The results show that the majority of the respondents were highly aware of computer ethics. Males have more awareness of the code of ethics than females. The factor that affected males was the religious factor, while the factors that affected females in their ethical judgments were religious factors, professional environment

and moral obligation. The results of this study can be applied on SUST and other universities, organizations and institutions, which help them on constructing their own code of ethics and policies.

## المستخلص

في ظل الإقتصاد العالمي اليوم أصبح الوعي بأهمية المعلومات عامل أساسي لإدارة نظم المعلومات, وتزيد هذه الأهمية بصورة كبيرة في الجامعات التي تتيح لمستخدميها كميات ضخمة من البيانات والموارد, وهذا يتطلب وبصورة هامة وعي الموظفين والطلاب بقضايا الحاسوب الأخلاقية التي تتعلق بإستخدام موارد المعلومات. النقص في وجود المبادئ الأخلاقية (code of ethics) والنقص في وجود سياسات فاعلة يجبرنا علي دراسة المبادئ الأخلاقية للحاسوب والتفكير في طرق جديدة لحل القضايا المطروحة.

يقوم هذا البحث بدراسة بعض القضايا المهمة والتي تشمل القضايا الأخلاقية والقانونية مثل جرائم الحاسوب وتخريبه, القرصنة, سرية البيانات, الملكية الفكرية, حقوق الطبع وقرصنة البرمجيات.

يقوم هذا البحث بالتحقق من الوعي الأخلاقي لإستخدام الحاسوب في الجناح الغربي لجامعة السودان للعلوم والتكنولوجيا, كما يبحث عن الفوارق بين الذكور والإناث في الحكم علي المواقف الأخلاقية الناجمة عن العمل في مجال الحاسوب ويحاول التوصل للعوامل التي تؤثر علي الذكور والإناث في الحكم علي المواقف الأخلاقية تجاه الحاسوب. تم توزيع إستبيان يستند علي مجموعة المبادئ الأخلاقية العشرة ويشتمل علي 20 سؤالاً وجهت للموظفين الذين لديهم علاقة بالحاسوب بالجناح الغربي لجامعة السودان والذين يمثلون عينة الدراسة , يبلغ عدد المشتركين في المسح 102 فرداً والذين يمثلون نسبة إستجابة تبلغ (85%).

أثبتت النتائج أن غالبية المشاركين في الإستبيان علي درجة عالية من الوعي بإخلاقيات الحاسوب, كما أثبتت النتائج أن درجة الوعي في الذكور أعلي من الإناث, أيضاً أثبتت النتائج أن أكثر العوامل التي تؤثر علي الذكور في الحكم الأخلاقي هو العامل الديني, أما أكثر العوامل التي تؤثر علي الإناث في حكمهم الاخلاقي هي العامل الديني, بيئة الإحتراف والإلتزام الأخلاقي.

نتائج هذا البحث يمكن أن تطبق علي جامعة السودان للعلوم والتكنولوجيا والجامعات والمؤسسات والمعاهد الأخرى كما تساهم في وضع القوانين والسياسات التي تحكم كيفية التعامل مع الحاسوب.

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## **LIST OF ABBREVIATIONS**

ACM	Association of Computing Machinery
ACM –SIGCAS	Association of Computing Machinery-Special Interest Group on Computers and Society
BCS	<a href="#">British Computer Society</a>
BSc	Bachelor of Science
CE	Computer Ethics
CEI	Computer Ethics Institute
DPMA	Data Processing Management Association
HSC	Humanistic Studies of Computing
IEEE	Institute of Electrical and Electronics Engineers
ICT	Information and Communications Technology
IS	Information Systems
MBA	Master of Business Administration
MLT	Medical Lab Technician
MSc	Master of Science
PC	Personal Computer
PhD	Doctor of Philosophy
SHC	Social and Humanistic Studies of Computing
SPSS	Statistical Package for Social Sciences
SUST	Sudan University of Science and Technology
UCITA	<a href="#">Uniform Computer Information Transactions Act</a>
WIPO	World Intellectual Property Organization