



**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH
TECHNOLOGY**

Computer Science and Ethics

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Abstract

Ethics justifies about the status of task whether it is correct or not, with this it includes the factor of social adoption i.e. what we do. This paper involves the review study of various ethics themes like computer ethics, information ethics and other also. Finally we conclude various factors related to ethics and their impact issues associated with computer science.

Keywords-Normative, e-government..

Introduction

In 1996 Gorniak kocikowska elaborated that computer ethics is the important recent development in the philosophy of ethics because computer ethics deals with the problems produced by the information and communication technology.

In 1976 Joseph Weizenbaum said that "The key question is the control of time". We would need more time to take some decisions. The rhythm of the computer and of the telecommunication systems is not the rhythm of time which is needed to take meaningful decisions.

In 1978 Manner explained that computer generate wholly new ethics problems that would not have existed if computer had not been invented. There should be a new branch of applied ethics made to take decision about the proposed new field that is computer ethics, a new field that studies ethical problems aggravated, transformed or created by computer technology.

In 1985, James Moore explained that a typical problem in computer ethics arises because there is a policy vacuum about how technology should be used. Computer provide us with new capabilities and these in turn give us new choice for action, often either no policies for conduct in these situations exist or existing policies seems inadequate. A control task of computer ethics is to determine what we should do in such cases that is formulate policies to guide our action.

In 1998 Tanavi represents the expansion of computer ethics to a different domain that lies outside textbooks and various scholarly articles. Lator – 1992, Maner -1996, Mackenzie & Wajcman-1985, Bynum & Rogerson – 1996 also make focus on various aspect of computer science and ethics[3].

"Technology is the answer" but what was the question, This statement again makes us rethink about the synchronization of technology and ethics.

A look on different type of ethics

Ethics tells about the flow of behaviour of a person in society and its association with concerned environment. It deals with the branch of philosophy.

Meta ethics tells and deals with the origination of ethical rules and their applications.

Normative Ethics deals with the theories of duty, virtue and consequentiality.

Applied Ethics involves the investigation and study of various moral issues that are controversial.

Computer Ethics includes the detailed analysis of impact of technology on society and aware about the need and enhancement of various policies and rules that are developed to handle the issues of concerned ethics. Privacy, hacking, pornography and the other are various issues.

That are included under target factor of computer ethics[1].

Information Ethics deals with information related issues in society. It includes sharing of information for betterment of all should be done but the negative factors that cause harm to that information must be blocked [1].

Cyber Ethics includes the factors that are associated in cyberspace and leads to morality and immorality at that place.

E-government Ethics includes the use of computer and information technology matters by various organizations and it makes the combined usage of computer information and cyber ethics with the involvement of other type of applied ethics[1].

Feminist ethics attempts to reformulate traditional ethical principles to develop more ethics for women [3].

Ethics of care is about the normative ethical theory about what makes action right or wrong .

With technology advancement in information technology certain issues that challenge the issues of ethics can be categorized as follows :-

1. Data security issue
2. Privacy issue
3. Unsocial activities (detaching of person from social activities)
4. Piracy
5. Diseases by excessive use of internet gaming and other .

The harmful web activities like hacking bank account , retrieving information of individual path tracking , voice tracking these are also other factors that are question marks to ethics factor. for example technology like no obvious relationship awareness provides the service to government and private sector about profiling capabilities .Similarly credit card purchases may make our certain information available to others and it is another issue for individual privacy .The spamming problem is one other factor that is to be recovered completely . Repetitive stress injury is one of dangerous disease and its basic cause of happening is computer work . Computer vision syndrome is another disease caused by similar reasons . Several people take enjoy working at home thus the computing environment can blur the traditional bound between work and family time .

Is telephone system violating our privacy is another matter and various case studies has been made on this issue . The techniques like call tracing and similar procedures have made a reduction in personal privacy of individual .

Security issues that are challenged by various hackers includes the various activities like the design of computer viruses that can be defined as self replicating code and cause harm various defending techniques are there but their strength get diminishes under the dynamic signature viruses.

It is crucial for theme makers, leaders, teachers, I.t. professionals and all social thinkers to get involved in the social and ethical issues of communication technology. policy vacuum which means how computer technology should be used is on common issue while exploring computer ethics issues. Another factor in the route is the conceptual vacuum. Action

of computer ethics in different fields such as, integrity achievement , confidentiality schemes, intellectual property barriers , privacy property issues, policies and values with respect to the varying computer technology is quite important[4].

Computer Ethics not only working on the theme of traditional ethics but it focuses on the pillar of technological aspects with a concomitant liberalism.

There are various issues that we discussed here , caused by the various factors are needed to be resolved firstly classification of concern problem factor and its extraction for treatment is another crucial activity in this area for sustainable progress

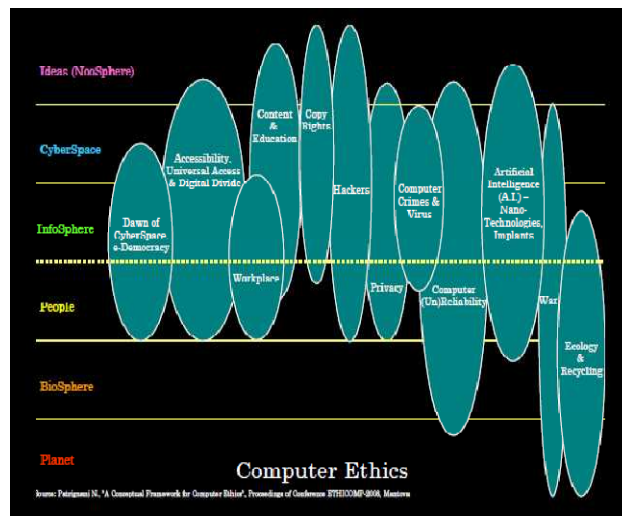


Fig1. A conceptual framework for computer ethics proceeding of conference ETHICOMP-2008[2]

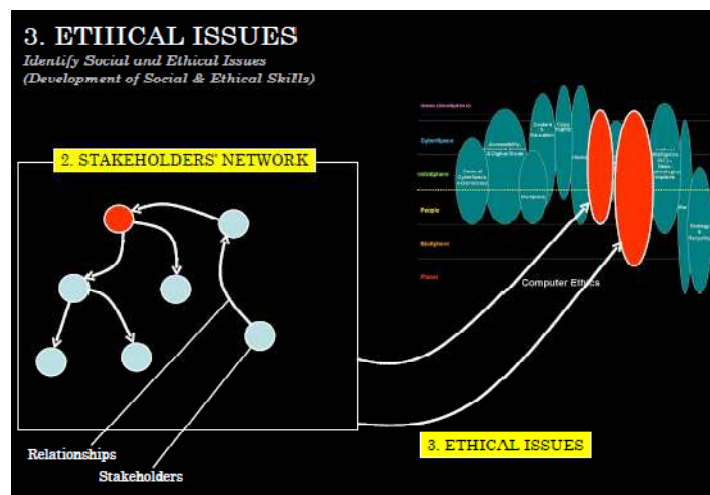


Fig2 : Identify social and Ethical issue [2]

Kimberly S. Young explained in his paper of computer ethics that there exists gender differences in ethical issues. Secondly internet use policies is contained by most of the companies but not properly synchronized with employees. One factor is that the internet policies are not dispersed properly. There is need of strong policies that should be created and properly implemented. Dependency of ethical behaviour and gender differences with personality factors should be explored so that various other factors could be analysed properly.

Intellectual property protection factors include the trade secrets, copyright, patents.

Conclusion

Firstly in this paper we expand the basic theme of ethics and then show its propagation under various form. Here it is tried to summarise the various parts of ethics and its impact on society with this the interrelationship of ethics and computer science is explained. Various approaches are also discussed to solve and tackle the concerned issues.

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