Cyber Ethics 4.0: Serving Humanity with Values

Module 1

Main Definitions

Photo by Erik Eastman on Unsplash

Globethics.net

Cyber Space and Society

Cyber, an abbreviation of cybernetics, means the virtual reality created by computer technologies in the large sense.

Cyber Space is the whole global space of virtual reality, a parallel world to the physical world, with uncountable interactions with the physical world.

Cyber Society means all aspects of modern society which are linked to cyber space and are influenced by it.

Data

Data means the representation of information, facts, concepts, and knowledge which are collected and have been or will be processed in a computer system or computer network and stored in the memory of a digital hard ware device/entity (computer, cloud etc.).

Big Data are very large amounts of data which are too large to be processed manually and/or inadequately structured to evaluate and make them meaningful and useful.

Artificial Intelligence (AI) is the ability of a computer or computer system to produce intelligent solutions and behaviours based on processing large amount of data (big data) and with self-learning mechanisms.

Ethics and Cyberethics

Ethics gives orientation about right and wrong, good and bad, based on religious, philosophical and other worldviews and value systems. This orientation aims at taken values-driven decisions.

Cyber Ethics gives orientation about right and wrong, good and bad, related to the cyber space.

Values, Virtues, and Norms

Values are general benchmarks of orientation for individuals, com- munities and institutions for what is good and right, such as freedom, justice and peace.

Virtues are benchmarks for individual behaviour for what is good and right such as honesty and modesty.

Norms (ethical) are rules, based on values and virtues, but concretised for specific situations.

Cyberspace features

Time: Cyberspace is anytime: fast, speedy, unbound time. Challenge: time differences are often underestimated.

Space: Cyberspace is everywhere: global, unbound space. Challenge: The human body is still bound to space.

Size: Cyberspace is mass production. Reaches great numbers. Challenge: Overwhelming information. Infobesity.

Virtual: Cyberspace is virtual: digital, not material and physical. Challenge: The distinction between real-virtual becomes difficult.

Anonymous: Cyberspace facilitates multiple identities. Challenge: Freedom versus dishonesty. Darknet as illegal space.

Money: Cyberspace seems to be to a large extent for free. Challenge: Cost and capital structures are often not transparent.

Power: Cyberspace seems to be democratic, participatory, open. Challenge: Existing power structures are often hidden.

The End