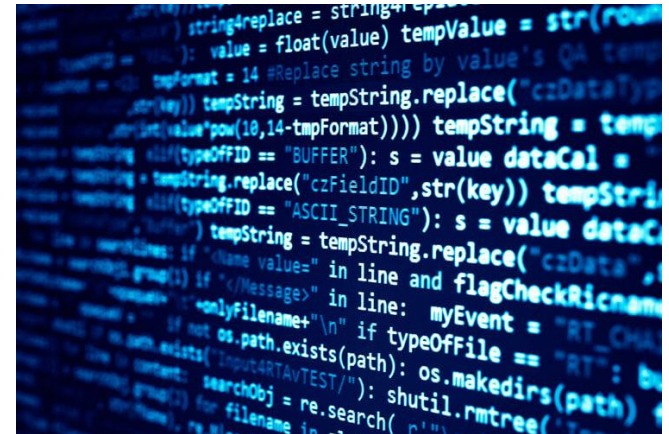


Social and Ethical Codes: Ethics, Values, and Computing

ENCS 393 – Social and Ethical Dimensions of ICTs

Day 4 – May 13, 2020



Announcements

- Reflection Essay #1 due on Friday evening
- Class does NOT meet on Monday, May 18

What is “Code”?

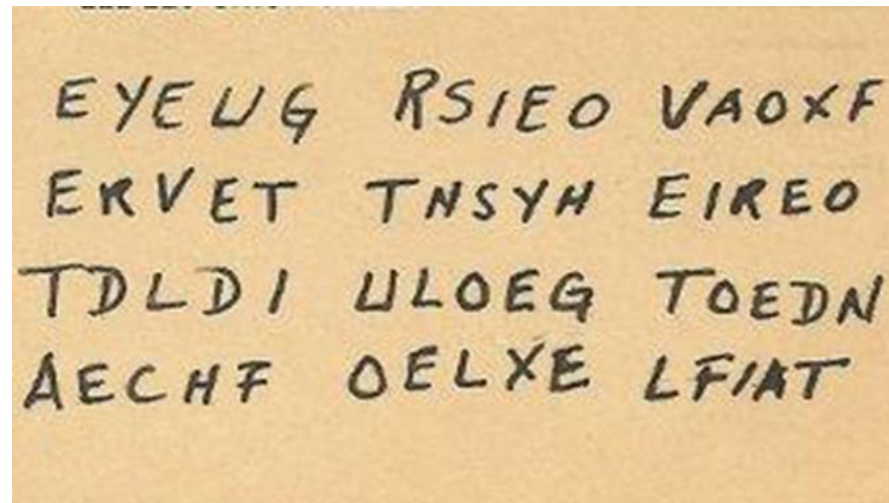
8.13

different context
通过同样的char等基础词汇构建不同内容

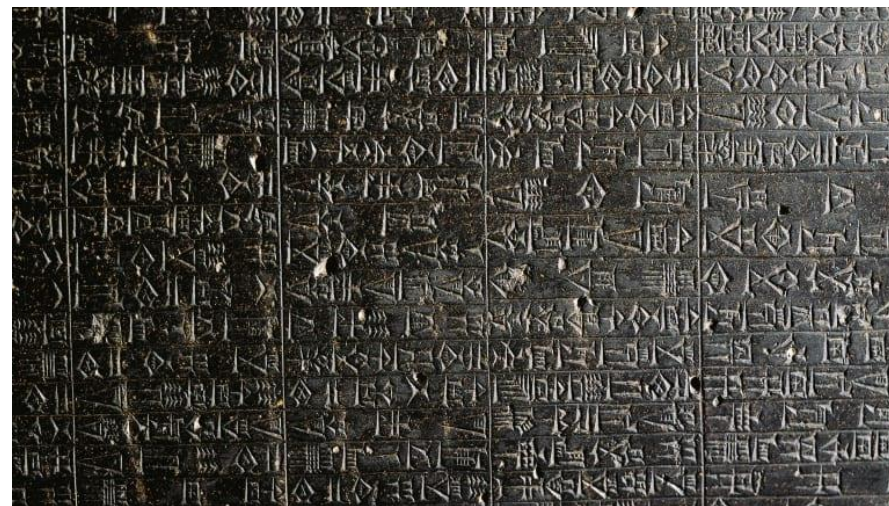
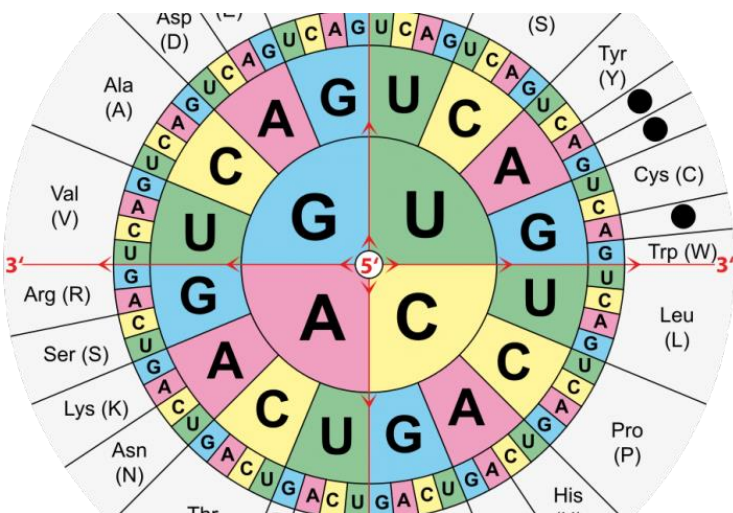
What is "Code"?



代码



暗号



汉穆拉比法典

What is “Code”?

- Sets of instructions 指令的集合，communicate some kind of information
- Executable/enforceable
可执行的
- Embody values (?)

体现价值

例如dress code，目的就是presenting themselves

codes of law codes of ethics同理，have principles or sets of beliefs behind them

道德准则

哪怕隐含一些的秘密secret code，也包括了一些重要信息

What is “Ethics”?

What is “Ethics”?

Ethics是philosophy的一个分支

ethics也叫做moral philosophy

当决定是right or wrong的时候，doing that in a systematic way, trying to come up with systems that will tell us what is right or wrong
defending our norms and standards of ethical behavior and ultimately recommending,捍卫我们的道德规范标准（norms and standards）并最终推荐

“The field of ethics (or moral philosophy) involves systematizing, defending, and recommending concepts of right and wrong. Philosophers today usually divide ethical theories into three general subject areas: metaethics, normative ethics, and applied ethics.”

(Internet Encyclopedia of Philosophy)

Metaethics asks where our ethical principles come from, and what their meaning is.

Normative ethics seeks to define right and wrong conduct. 我们讨论的大多是这个

试图找到一个guideline that we can tell what kind of behavior is right or wrong

Applied ethics examines specific controversial issues, e.g. capital punishment, animal rights, gun control.

Virtue Ethics

- One strategy for defining normative ethics.

normative ethics的一种

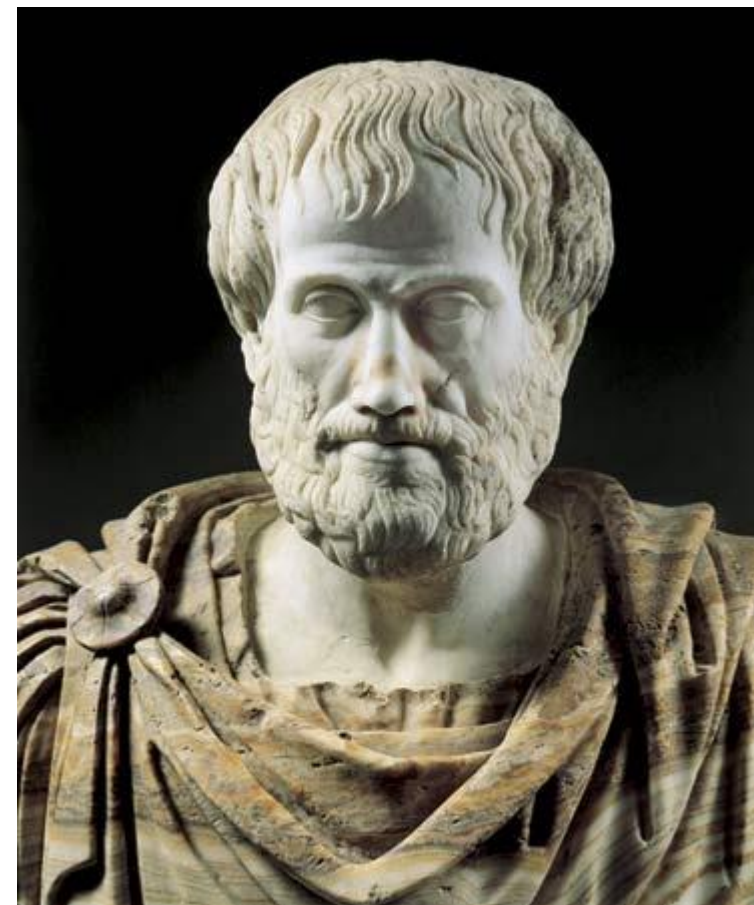
- Virtue ethics holds that developing good *character* is an important part of achieving good *conduct*. In other words, if we develop the right ~~character traits~~, we will automatically act ethically.

品格

如果我们培养了正确的性格特征

- What are “good” character traits? It depends! For Plato, wisdom, courage, temperance, justice (among others). For Aristotle, *eudaimonia* (happiness, prosperity, flourishing), also among others. For medieval Christian philosophers, faith, hope, and charity.

live our best life



Aristotle

义务

Deontology/Duty Ethics

- Another way to define normative ethics.
- Right and wrong do not necessarily come from pursuing good character, but rather from acting in conjunction with moral laws/duties.
与一个人是不是good person 无关，而是whether in correspondence with一致 moral laws /person's duty or not
- Often associated with German philosopher Immanuel Kant (1724-1804).
- Focus on *actions* themselves, rather than the consequences of actions.



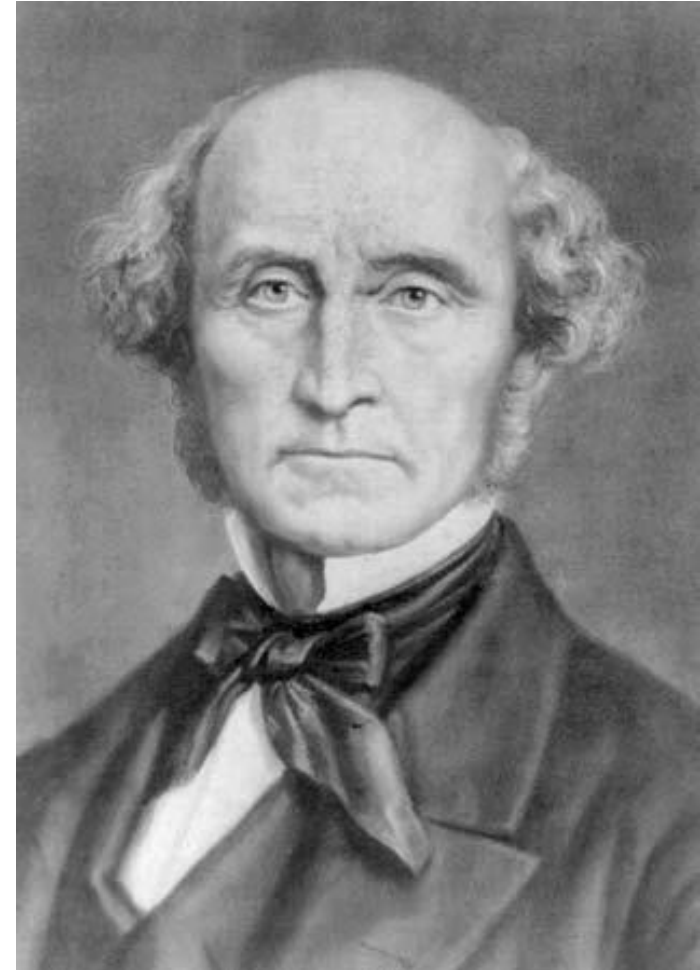
Consequentialist Ethics

结果论

- A third way to arrive at proper normative ethics!
- Focus on the consequences of our actions, as opposed to our character or the actions themselves.

功利主义

- Famous example: utilitarianism. An action is right if the consequences of that action are more favourable than unfavourable, for *everyone*.



John Stewart Mill

Computer Ethics?

两个都是metaEthics

目的不是在于build一个准则，来告诉我们怎样合理使用computer，not considering specific problems, 而是 technology,computer有没有使传统ethics发生变化，whether computer ethics is an important thing

答案是yes

1985,他的paper写的很早
奠基了foundation
of computer ethics



32.18

Computer Ethics?

Why do we need “computer ethics”?

Can't we just take the normative ethical approaches that already exist and apply them to computing technologies?

James Moore的讨论部分

Deborah Johnson(后者) 更强调why computer ethics is important, why does the field exist, what is unique about computers when it comes to ethical behavior

Computer Ethics

“Computer ethics is not a fixed set of rules which one shellacs and hangs on the wall. Nor is computer ethics the rote application of ethical principles to a value-free technology. Computer ethics requires us to think anew about the nature of computer technology and our values.” James Moore

We need to think in a new way

1.what computing technologies do

2.what our values around them are//value这个词很重要， expressing the point that on our outlooks and our beliefs, but what's important in the world have a tendency to become expressed through the technologies that we create9 展现了我们的价值观，最重要的是世界上有趋势，通过我们的科技来展示价值观

Computer Ethics

First argument

Why do we need “computer ethics”?

真空，意思就是gap

- Moor: Policy vacuums exist alongside corresponding conceptual vacuums.

— Computing technologies are new, because they are new, there are

Policy vacuum: there are open spaces and existing laws and regulations that failed to address things that one can do using computing technologies.

there are laws that we maybe need that are missing, that haven't been created yet, that relate to the ways that computers work in the things that people can do with computer

Conceptual Vacuum: 不仅缺失了policy，我们也缺失了 the ways that we need to think about these laws are also not there. So we don't have laws and we don't have the means to make the laws that are necessary

Computer Ethics

Why do we need “computer ethics”?

- Moor: Why these vacuums? Because computers are revolutionary, due to their *logical malleability*. 逻辑延展性

we can use computers to do all kinds of different things. This is not a tool that's been designed for one specific purpose, or even a small set of specific purposes.

computers can be shaped or molded to any activity that can be characterized in terms of inputs, outputs, and connecting logical operations
Because they are so powerful, they have the potential to revolutionize the world in a way that few other technology have on.

this is a kind of technologically to determine a statement, right? Or at least a soft technologically determined statement.

So we have these policy vacuum that we don't know how to make laws and rules to fill them(at 1985)

Instead of broad strokes, we're not going to be able to think about things in the same way that we did before

first argument about why computer ethics is important.

Computer Ethics

40.02

Why do we need “computer ethics”?

- Moor: Why these vacuums? Because computers are revolutionary, due to their *logical malleability*.

“During the Computer Revolution many of our human activities and social institutions will be transformed. These transformations will leave us with policy and conceptual vacuums about how to use computer technology. Such policy and conceptual vacuums are the marks of basic problems within computer ethics. Therefore, computer ethics is a field of substantial practical importance.”

Computer Ethics

Why do we need “computer ethics”?

- Moor: Why else are computer ethics important? Because computer operations are *invisible*.
 - Invisible abuse
 - Invisible programming values
 - Invisible complex calculation

Computer Ethics

Why do we need “computer ethics”?

- Johnson: ICTs create *new possibilities* for human action, and these possibilities sometimes *change the moral character* of actions/situations.

Computer Ethics

Why do we need “computer ethics”?

- Johnson: Computing technologies are complex and *value-laden*. To understand values embedded in technology, we need to know how the technology works *and* how values work, i.e. it is not sufficient to simply apply an existing ethical theory.

Computer Ethics

Why do we need “computer ethics”?

- Moor: We don't have existing policy that covers computer ethics.
- Moor: Computers are revolutionary due to their *logical malleability*.
- Moor: Computer operations are *invisible*.
- Johnson: Computers give us *new actions* and *new moral character* for actions.
- Johnson: Computing technologies are *value-laden*.

Who Needs Computer Ethics?

Social contract theory describes how a profession and its members acquire certain privileges in exchange for accepting responsibilities.

-> Computer ethics is important for computer scientists and IT professionals

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“Many of the core issues in computer ethics are social value and policy issues, such as privacy and property rights. These are issues for all citizens, not just computer professionals.”

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Who Needs Computer Ethics?

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-> Computer ethics is important for EVERYONE

Privacy, surveillance, governance, ownership, communication, social institutions, anonymity, global scope, reproducibility, accountability

A “Code” for Computer Ethics?

“Computer ethics is not a fixed set of rules which one shellacs and hangs on the wall.”

A “Code” for Computer Ethics?

Asimov’s Laws of Robotics:

- **Zeroth Law:** A robot may not harm humanity, or, through inaction, allow humanity to come to harm.
- **First Law:** A robot may not injure a human being, or, through inaction, allow a human being to come to harm, except where following this law would conflict with the above Law.
- **Second Law:** A robot must obey the orders given to it by humans, except where such orders would conflict with the above Laws.
- **Third Law:** A robot must protect its own existence, as long as such protection does not conflict with the above Laws.

A “Code” for Computer Ethics?

ACM Code of Ethics and Professional Conduct

Motivation:

“The Code is designed to inspire and guide the ethical conduct of all computing professionals, including current and aspiring practitioners, instructors, students, influencers, and anyone who uses computing technology in an impactful way.”

“The Code includes principles formulated as statements of responsibility, based on the understanding that the public good is always the primary consideration.”

ACM Code of Ethics

Ethical Principles:

“Contribute to society and well-being, acknowledging that all people are stakeholders in computing.”

“Avoid harm.”

“Be honest and trustworthy.”

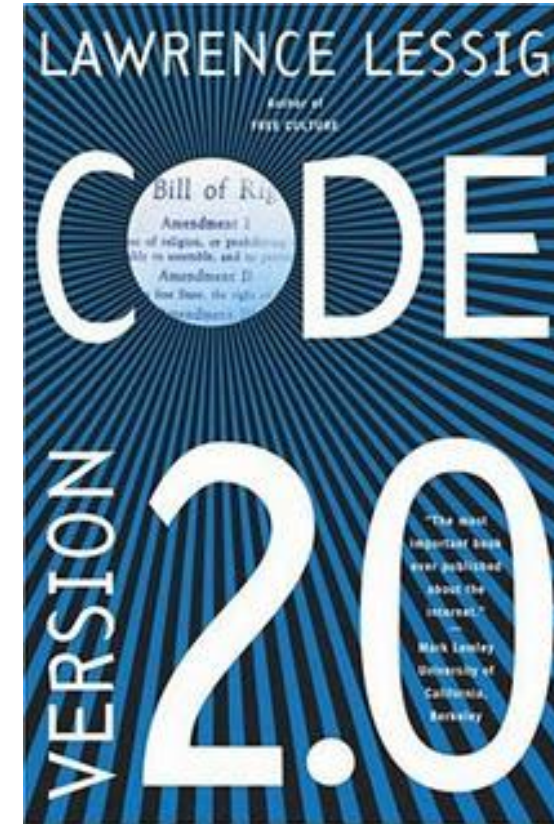
“Be fair and take action not to discriminate.”

“Respect the work required to produce new ideas, inventions, creative works, and...artifacts.”

“Respect privacy.”

“Honor confidentiality.”

Four Puzzles from Cyberspace



Mini-Assignment #3: Building Ethical Code

For this Mini-Assignment you will engage with Moor and Johnson's ideas about the importance of computer ethics alongside the ACM's attempt to put computer ethics into practice.

First, pick one of the parts of Section 3 of the ACM's Code of Ethics: Professional Leadership Principles (3.1-3.7).

For the part that you have picked, explain two things:

1. What kinds of ethical workplace behaviours could result from following this part of the code? Give a practical example and be as specific as possible!
2. How (if at all) does this aspect of the Code take Moor and Johnson's arguments about computer ethics into account?

Write a few sentences in response to each of these questions. **Due by Monday night.**

Reading Hints for Next Wednesday

ICTs and Social Interactions

- *danah boyd, “Searching for a Public of Their Own” from It’s Complicated: The Social Lives of Networked Teens*
 - Social relationships between humans, mediated by technologies
 - What is boyd’s main argument about online social interactions?
- *Sherry Turkle, “Alive Enough” from Alone Together: Why We Expect More from Technology and Less from Each Other*
 - Social relationships between humans and technologies
 - What points does Turkle make about the evolution of such relationships?