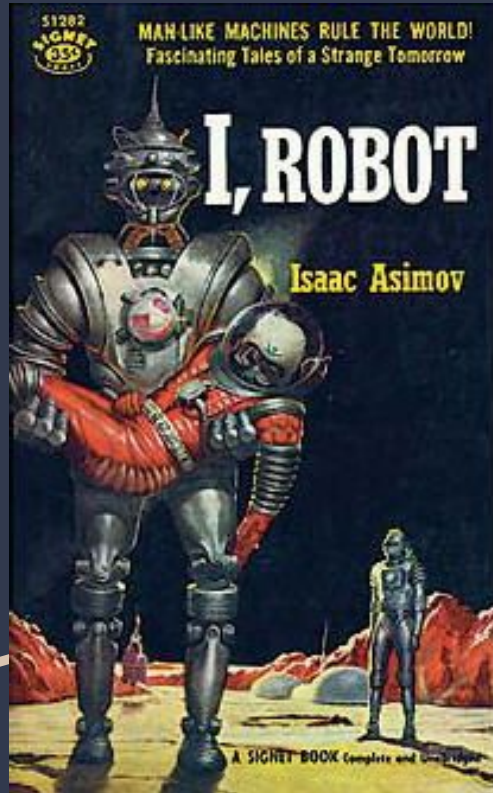# Ética em Computação

Fabio Kon
IME-USP

2020

1942 – Isaac Asimov

First Law

A robot may not injure a human being or, through inaction, allow a human being to come to harm.
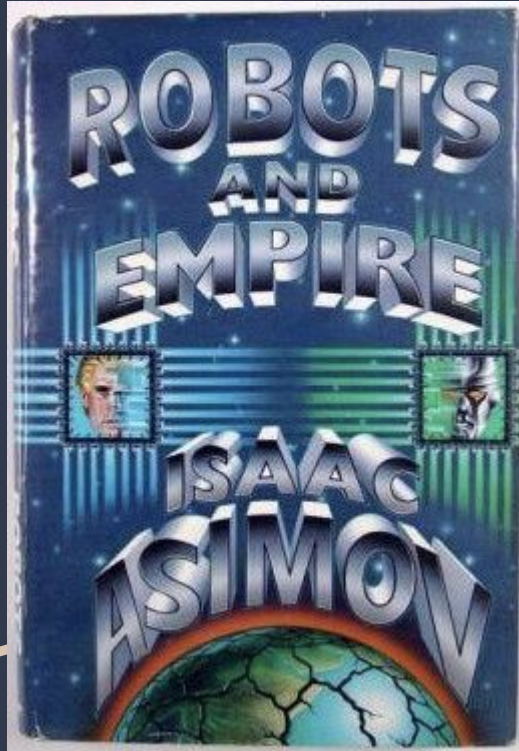
Second Law

A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

Third Law

A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

1985 – Isaac Asimov

Zeroth Law

A robot may not harm humanity, or, by 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.

Second Law

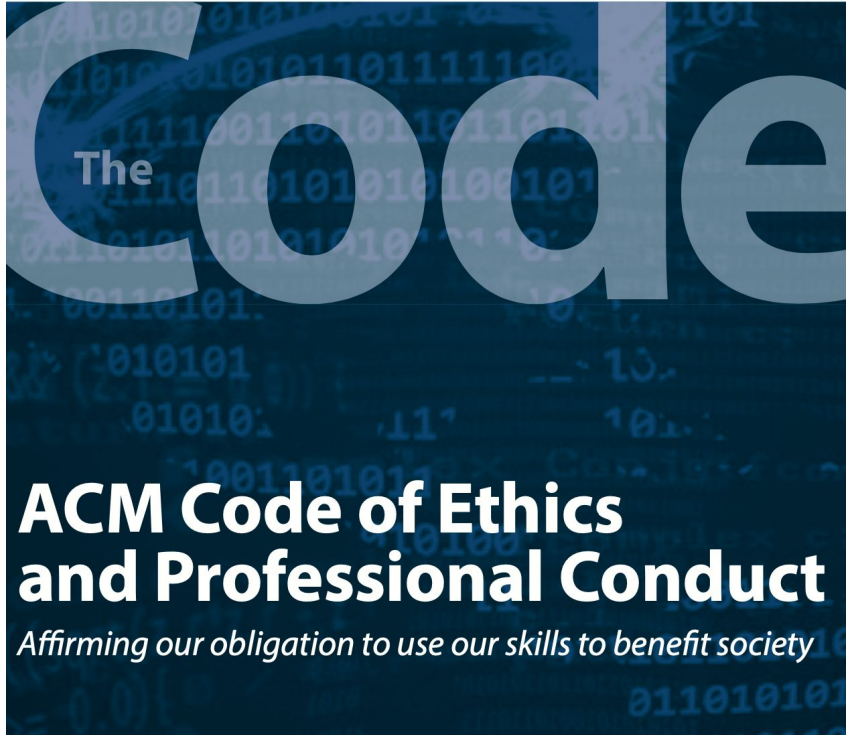A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

Third Law

A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

ACM Code of Ethics and Professional Conduct

Affirming our obligation to use our skills to benefit society

- General Ethical Principles
- Professional Responsibilities
- Professional Leadership Principles
- Compliance with the Code
- Case Studies
- Using the Code

4

General Ethical Principles

General Ethical Principles

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

General Ethical Principles

2. Avoid harm

General Ethical Principles

3. Be honest and trustworthy

General Ethical Principles

4. Be fair and take action not to discriminate

General Ethical Principles

5. Respect the work required to produce new ideas, inventions, creative works, and computing artifacts

General Ethical Principles

6. Respect privacy

General Ethical Principles

7. Honor confidentiality

Professional Responsibilities

Professional Responsibilities

1. Strive to achieve high quality in both the processes and products of professional work

Professional Responsibilities

1. Strive to achieve high quality in both the processes and products of professional work

    Make a positive impact

Professional Responsibilities

2. Maintain high standards of professional competence, conduct, and ethical practice

Professional Responsibilities

3. Know and respect existing rules pertaining to professional work

Professional Responsibilities

4. Accept and provide appropriate professional review

Professional Responsibilities

5. Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks

Professional Responsibilities

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Computing is a service to society

Professional Responsibilities

6. Perform work only in areas of competence

Professional Responsibilities

7. Foster public awareness and understanding of computing, related technologies, and their consequences

Professional Responsibilities

8. Access computing and communication resources only when authorized or when compelled by the public good

Professional Responsibilities

9. Design and implement systems that are robustly and usably secure

Case for discussion (1)

Highly robust web hosting company: *Bullet-proof sites*
 Promises to keep the customer site up no matter what

Start to be used by
 Spam
 Malware

Several people, companies and government agencies tried to negotiate with them a scheme for bringing down some of the bad sites - they refuse to cooperate

Task force aimed at putting it down
 Creating a worm to invade the system and stop it
 What about other customers that use the site

Case for discussion (2)

Estudante cria robô que baixa artigos científicos e coloca num repositório aberto

Artigos estão protegidos por copyright

Editoras vivem disso e podem ir à falência gerando milhares de demissões

Artigos custam caríssimo e são inacessíveis para pesquisadores de países pobres ou mesmo instituições pobres de países ricos

Ciência gera tecnologia apenas em ambientes ricos, perpetuando as diferenças sociais

Estudante é preso, entra em depressão e se suicida

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Documentário interessante que aborda esse caso:

"A Ciência precisa de pirataria"

https://youtu.be/A-6QrupOm1I

Center for Humane Technology

WHO WE ARE | WHAT

For Technologists

Ética em Computação - Alguns ponteiros

CACM: Computing Ethics Operationalizing AI Ethics Principles -

https://www.nytimes.com/interactive/2018/12/10/business/location-data-privacy-apps.html

https://www.acm.org/code-of-ethics. => usar o Booklet que tem exemplos.

Toshiba e Hawuei já foram pegas no passado vazando dados de equipamentos para suas sedes.
Google e Apple vazam sistematicamente e todo mundo sabe.
Nova versão da MacOS X comunica a Apple qualquer execução de novo aplicativo.

* computer-enabled crime
* disasters caused by computer failures
* invasions of privacy via computer databases
* major law suits regarding software ownership

James Moor (Dartmouth College) published influential article "What Is Computer Ethics?"

New Twist to Old Ethical Issues:
"ethical problems aggravated, transformed or created by computer technology" Maner
"pose new versions of standard moral problems and moral dilemmas, exacerbating the old problems, and forcing us to apply ordinary moral norms in uncharted realms " Johnson

Computers in the Workplace
Computer Crime
Privacy and Anonymity
Intellectual Property
Professional Responsibility
Eleição com urna eletrônica
Ética em Inteligência Artificial