Codes of Ethics and Ethical Guidelines

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Code of Ethics:
a set of rules about good and bad behavior

▸ Professional codes of ethics
 apply to members of a certain profession

▸ Organizational codes of ethics
 apply to members of the association enacting the code

▸ Practice-specific codes of ethics
 apply to anyone involved in a certain practice

(cf.: Davis 2013)

Are Ethics Codes useful documents?

Contra

- Ethics codes are pointless and may be harmful
- Professionals often do not consult their ethics codes
- The guidelines within ethics codes are often inconsistent
- Ethics codes inadequately suggest law-like rules, they prevent individuals from reflecting autonomously
- There is no special ethics for professionals

(cf. Luegenbiehl 1983, Ladd 1991)

Are Ethics Codes useful documents?

Pro

"The code is to protect each professional from certain pressures (for example, the pressure to cut corners to save money) by making it reasonably likely...that most other members of the profession will *not* take advantage of her good conduct. A code protects members of a profession from certain consequences of competition. A code is a solution to a coordination problem."

(Davis, 1991, p.154)

Functions of Ethics Codes

- Shared Standards
- Inspiration and Guidance
- Support
- Deterrence and Discipline
- Education and Mutual Understanding
- Contribution to Public Image

(O'Rourke 2017, following Martin & Schinzinger)

Association for Computing Machinery (ACM)

- International academic association for computing
- Founded in 1947
- More than 100,000 members

- "ACM, the world's largest educational and scientific computing society, delivers resources that advance computing as a science and a profession. ACM provides the computing field's premier Digital Library and serves its members and the computing profession with leading-edge publications, conferences, and career resources."

https://www.acm.org/

ACM Code of Ethics

- Adopted by the ACM council on June 22, 2018

- "ACM has updated its Code of Ethics and Professional Conduct. The revised Code of Ethics addresses the significant advances in computing technology since the 1992 version, as well as the growing pervasiveness of computing in all aspects of society.
- ACM's Code of Ethics is considered the standard for the computing profession, and has been adopted by computing professionals, organizations and technology companies around the world. The Code is a collection of principles and guidelines designed to help computing professionals make ethically responsible decisions in professional practice."

https://www.acm.org/

ACM Code of Ethics: Overview

- Preamble
- 1. GENERAL ETHICAL PRINCIPLES
- 2. PROFESSIONAL RESPONSIBILITIES
- 3. PROFESSIONAL LEADERSHIP PRINCIPLES
- 4. COMPLIANCE WITH THE CODE

ACM Code of Ethics – Preamble

- Computing professionals' actions change the world. To act responsibly, they should reflect upon the wider impacts of their work, consistently supporting the public good. The ACM Code of Ethics and Professional Conduct ("the Code") expresses the conscience of the profession.
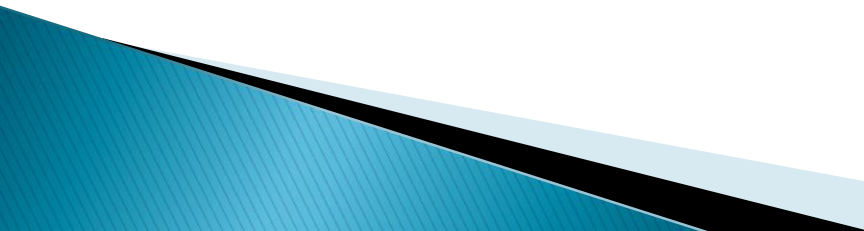
ACM Code of Ethics – Preamble

- 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.	Additionally, the Code serves as a basis for remediation when violations occur.

- 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

1. GENERAL ETHICAL PRINCIPLES
- 1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.
- 1.2 Avoid harm.
- 1.3 Be honest and trustworthy.
- 1.4 Be fair and take action not to discriminate.
- 1.5 Respect the work required to produce new ideas, inventions, creative works, and computing artifacts.
- 1.6 Respect privacy.
- 1.7 Honor confidentiality.

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

- This principle, which concerns the quality of life of all people, affirms an obligation of computing professionals, both individually and collectively, to use their skills for the benefit of society, its members, and the environment surrounding them. (…)

- An essential aim of computing professionals is to minimize negative consequences of computing, including threats to health, safety, personal security, and privacy. When the interests of multiple groups conflict, the needs of those less advantaged should be given increased attention and priority.

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

- Computing professionals should consider whether the results of their efforts will respect diversity, will be used in socially responsible ways, will meet social needs, and will be broadly accessible. They are encouraged to actively contribute to society by engaging in pro bono or volunteer work that benefits the public good.

- (…) computing professionals should promote environmental sustainability both locally and globally.

1.2 Avoid harm

- Well-intended actions, including those that accomplish assigned duties, may lead to harm. When that harm is **unintended**, those responsible are obliged to undo or mitigate the harm as much as possible. Avoiding harm begins with careful consideration of potential impacts on all those affected by decisions. When harm is an **intentional part of the system**, those responsible are obligated to ensure that the harm is ethically justified. In either case, ensure that all harm is minimized.

1.2 Avoid harm

A computing professional has an additional obligation to report any signs of system risks that might result in harm. If leaders do not act to curtail or mitigate such risks, it may be necessary to "blow the whistle" to reduce potential harm. However, capricious or misguided reporting of risks can itself be harmful. Before reporting risks, a computing professional should carefully assess relevant aspects of the situation.

1.3 Be honest and trustworthy

▸ Honesty is an essential component of trustworthiness. A computing professional should be transparent and provide full disclosure of all pertinent system capabilities, limitations, and potential problems to the appropriate parties.
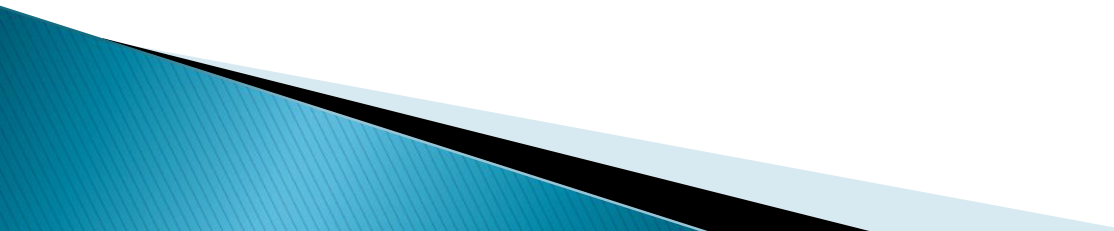
Making deliberately false or misleading claims, fabricating or falsifying data, offering or accepting bribes, and other dishonest conduct are violations of the Code.

1.4 Be fair and take action not to discriminate

- Computing professionals should foster fair participation of all people, including those of underrepresented groups. Prejudicial discrimination on the basis of age, color, disability, ethnicity, family status, gender identity, labor union membership, military status, nationality, race, religion or belief, sex, sexual orientation, or any other inappropriate factor is an explicit violation of the Code.

1.4 Be fair and take action not to discriminate

▸ The use of information and technology may cause new, or enhance existing, inequities. Technologies and practices should be as inclusive and accessible as possible and computing professionals should take action to avoid creating systems or technologies that disenfranchise or oppress people. Failure to design for inclusiveness and accessibility may constitute unfair discrimination.

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

- Computing professionals should (…) credit the creators of ideas, inventions, work, and artifacts, and respect copyrights, patents, trade secrets, license agreements, and other methods of protecting authors' works.

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

- Computing professionals should not unduly oppose reasonable uses of their intellectual works. Efforts to help others by contributing time and energy to projects that help society illustrate a positive aspect of this principle. Such efforts include free and open source software and work put into the public domain.

1.6 Respect privacy

- Computing professionals should only use personal information for legitimate ends and without violating the rights of individuals and groups. This requires taking precautions to prevent re-identification of anonymized data or unauthorized data collection, ensuring the accuracy of data, understanding the provenance of the data, and protecting it from unauthorized access and accidental disclosure.
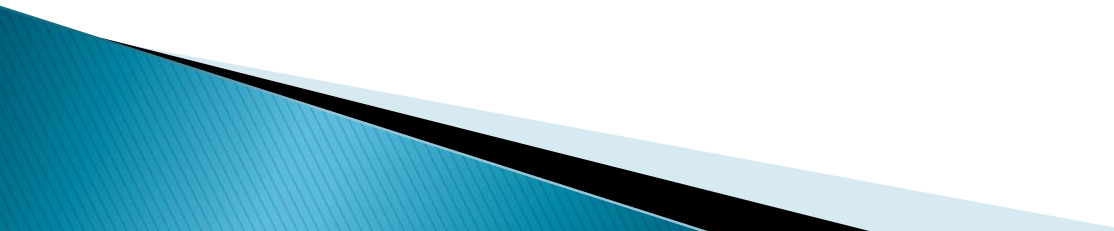
1.6 Respect privacy

- Computing professionals should establish transparent policies and procedures that allow individuals to understand what data is being collected and how it is being used, to give informed consent for automatic data collection, and to review, obtain, correct inaccuracies in, and delete their personal data.

- Only the minimum amount of personal information necessary should be collected in a system.

1.7 Honor confidentiality

▸ Computing professionals are often entrusted with confidential information such as trade secrets, client data, nonpublic business strategies, financial information, research data, pre-publication scholarly articles, and patent applications. Computing professionals should protect confidentiality except in cases where it is evidence of the violation of law, of organizational regulations, or of the Code.
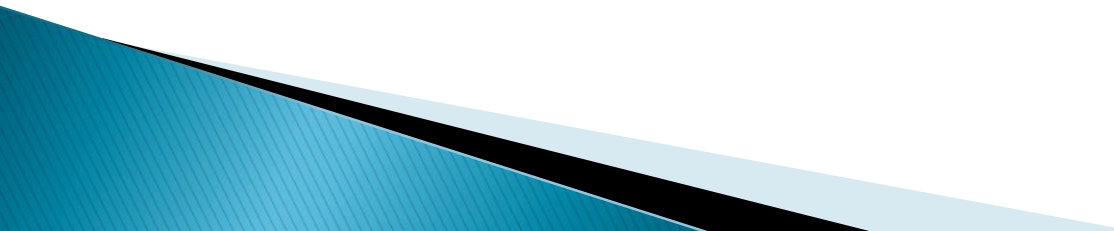
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2. PROFESSIONAL RESPONSIBILITIES

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

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

- 2.3 Know and respect existing rules pertaining to professional work.

- 2.4 Accept and provide appropriate professional review.

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

- 2.6 Perform work only in areas of competence.

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

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

- 2.9 Design and implement systems that are robustly and usably secure.

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ACM Code of Ethics: Questions

- Which aspect / sentence / paragraph do you consider **most important**?

- Which aspect / sentence / paragraph do you consider **most unexpected or unusual**?

- Which aspect / sentence / paragraph do you consider **problematic**?

Literature

- Davis, M. (2013): "Codes of Ethics", *The International Encyclopedia of Ethics*, ed.: Hugh LaFollette, Wiley-Blackwell.
- Davis, Michael (1991): "Thinking like an Engineer: The Place of a Code of Ethics in the Practice of a Profession", *Philosophy and Public Affairs* 20.2:150-167.
- Ladd, John (1991): "The Quest for a Code of Professional Ethics: An Intellectual and Moral Confusion". *Ethical Issues in Engineering*. Ed. Deborah G. Johnson. Englewood Cliffs, NJ: Prentice-Hall, 130-136.
- Luegenbiehl, Heinz C. "Codes of Ethics and the Moral Education of Engineers", *Business and Professional Ethics Journal* 2 (1983): 41-61. Rpt. in *Ethical Issues in Engineering* . Ed. Deborah G. Johnson. Englewood Cliffs, NJ: Prentice-Hall, 1991. 137-154.
- Martin, Mike W., Schinzinger, Roland (1989): *Ethics in Engineering, 2nd ed.,* McGraw Hill: New York.
- O'Rourke, Devin (2017): Ethics Codes, cseplibrary@iit.edu.