COMP1511:
Ethics In ICT and Professionalism

Session 2, 2018

Ethics in ICT

- **Computer ethics** is a part of **practical philosophy** concerned with how computing professionals should make decisions regarding professional and social conduct.

- Various national and international professional societies and organizations have produced **code of ethics** documents to give basic **behavioral guidelines** to **computing professionals** and users.

Ethics in ICT

For example:

- **Association for Computing Machinery**
  - ACM Code of Ethics and Professional Conduct

- **Australian Computer Society**
  - ACS Code of Ethics
  - ACS Code of Professional Conduct

- **British Computer Society**
  - BCS Code of Conduct

And many more … …

ACM Code of Ethics and Professional Conduct

- The Code is designed to **inspire** and **guide** the **ethical conduct** of all computing professionals.

- 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.

- **Guidelines** and **explanations** to assist computing professionals in understanding and applying the principle.

1. GENERAL ETHICAL PRINCIPLES.

From https://ethics.acm.org/ ,

A computing professional should…

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**.

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**.

3. PROFESSIONAL LEADERSHIP PRINCIPLES.

A computing professional, especially one acting as a leader, should…

3.1 Ensure that the **public good is the central** concern during all professional computing work.

3.2 Articulate, encourage acceptance of, and evaluate fulfillment of **social responsibilities** by members of the organization or group.

3.3 Manage personnel and resources to enhance the **quality of working life**.

3.4 Articulate, apply, and support policies and processes that reflect the principles of the Code.

… … …

… … …

Using the Code : Case Studies

- As prescribed by the Preamble of the Code, computing professionals should **approach the dilemma with a holistic reading** of the principles and evaluate the situation with thoughtful **consideration to the circumstances**.

- In all cases, the computing professional should defer to the **public good** as the paramount consideration.

Example case studies available at :

https://ethics.acm.org/code-of-ethics/using-the-code/
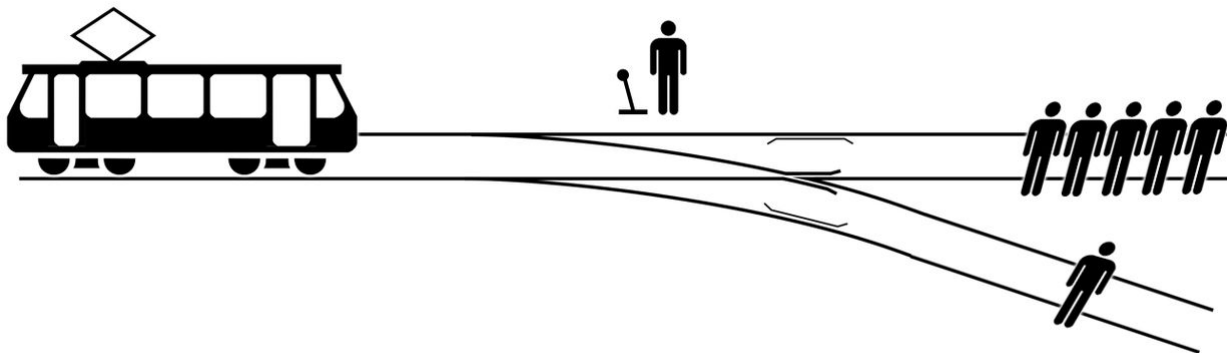
Ethical Dilemma : An Example

(from Wikipedia)

Trolley problem:

Should you pull the lever to divert the runaway trolley onto the side track?

1. **Do nothing** and allow the trolley to **kill the five people** on the main track.
2. **Pull the lever**, diverting the trolley onto the side track where it will **kill one person**.

➔ **Which is the most ethical option?**

Examples of Ethical and/or Professional Failures

- IBM's 2016 Census Failure *(Ethical and/or Professional failure?)*

- Facebook Data Privacy Scandal (2018) *(Ethical and/or Professional failure?)*

- Banking Royal Commission 2018 *(Ethical and/or Professional failure?)*

- Financial Crisis 2007-2008 *(Ethical and/or Professional failure?)*