Professional Ethics

CS210 Spring 2015
Week 13
PROFESSIONALISM
Professional

• Occupation where decisions and actions have significant social effects (e.g. doctors, lawyers)
• Roles and responsibilities exceed those of non-professionals
Safety Critical Software

- air traffic control
- mass transportation
- nuclear reactors
- missile systems
- medical equipment
- design/architecture software
- medical analysis software
IEEE Code of Ethics

1. to accept responsibility in making decisions consistent with the safety, health, and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;

2. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;

3. to be honest and realistic in stating claims or estimates based on available data;

4. to reject bribery in all its forms;
IEEE Code of Ethics

5. to improve the understanding of technology; its appropriate application, and potential consequences;

6. to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;

7. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;
IEEE Code of Ethics

8. to treat fairly all persons and to not engage in acts of discrimination based on race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;

9. to avoid injuring others, their property, reputation, or employment by false or malicious action;

10. to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.
ACM Code of Ethics (Section 1)

1. Contribute to society and human well-being
2. Avoid harm to others
3. Be honest and trustworthy
4. Be fair and take action not to discriminate
5. Honor property rights, including copyrights
6. Give proper credit for intellectual property
7. Respect the privacy of others
8. Honor confidentiality
ACM Code of Ethics (Section 2)

1. Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work.
2. Acquire and maintain professional competence.
3. Know and respect existing pertinent laws.
4. Accept and provide professional review.
ACM Code of Ethics (Section 2)

5. Give comprehensive evaluations of computer systems, including analysis of possible risk
6. Honor contracts, agreements, and assigned responsibilities
7. Improve public understanding of computing and its consequences
8. Assess computing and communication resources only when authorized to do so
WHISTLEBLOWING
Whistleblowing

- an individual who makes revelations meant to call attention to negligence, abuses, or dangers that threaten the public interest
- whistleblowers “sound the alarm” from within the organization in which they work
- also a form of dissent, which can have destructive side-effects
When to blow the whistle?

- Richard De Gorge’s criteria
- Morally *permitted* to blow the whistle
  1. The product will do serious harm to the public
  2. The engineer has reported threat to supervisor
  3. The engineer has exhausted all internal procedures
- Morally *obligated* to blow the whistle
  4. The engineer has accessible, documented evidence that their view of the situation is correct
  5. The engineer has good reasons to believe that going public is necessary to bring about change
Another Approach

• Michael McFarland
• Engineers must see their work in relation to society, or an adequate account of their ethical responsibilities cannot be given
• Engineers must learn to act in collaboration with others both inside and outside their profession or they will not be able to meet their responsibilities
RESPONSIBILITY, LIABILITY AND ACCOUNTABILITY
Responsibility

• Moral responsibility is described in terms of *causality* and *intent*.
• If a moral agent *causes* harm, they bear some moral responsibility, regardless of intent.
• If a moral agent *intends* harm, they bear some moral responsibility, regardless of the outcome.
• Attributes blame (or praise).
Liability

• Liability is a *legal* concept, not moral.
• Blame or fault is not important.
• Compensation can be required even when responsibility is admitted.
Accountability

• Not interested in assigning moral OR legal judgment
• Some individual or group is answerable for problems
• “Problem of many hands” - accountability is distributed in a large project or organization
Presentation

• Find your groups and go to your assigned room
  – Course staff will go with you
• You’ll get two forms:
  – Evaluation form for grading
  – Feedback forms for individual written feedback
Rhetoric is the art of ruling the minds of men.
-Plato.