Moral Frameworks and Ethical Values

CSci 110
Summer 2006
(adapted from a presentation by Prof. Dianne Martin)

Welcome to the Moral High Ground!

Warm-up Question

- Do you think right and wrong are absolute?
  Deontological

- Do you think right and wrong depend upon the situation?
  Teleological

- **Write down an example**

To Be Considered…

- Overview of Philosophical World Views
- Humans as "Moral Agents"
- General Framework for Ethical Behavior
- Computer Specific Ethical Issues
- Framework for professional ethical behavior
- Role of professional Ethics Codes to enable decision-making

Overview of Philosophical World Views

Philosophical Systems

Metaphysics – nature of reality

Epistemology – theory of truth

Axiology - value

Idealism

Metaphysics – reality is spiritual, the idea or ideal

Epistemology – truth comes from the mind, is absolute

Axiology – goodness is in ideal

Realism

Metaphysics – reality is matter, material, natural

Epistemology – truth comes from experience, empirical data

Axiology – goodness is harmony with nature

Pragmatism(Utilitariansim)

Metaphysics – reality is a dynamic process, relative to situation

Epistemology – truth comes from testing things out, changing, relative

Axiology – ends justify the means

Existentialism

Metaphysics – reality is defined by each individual

Epistemology – truth comes choices made by the individual

Axiology – value created by individual

Ethics = moral norms

- **Within a philosophical framework, philosophers ask questions about moral norms**
- **critical reflections on question of how human beings <u>ought</u> to act**
- **ask why, roots, motives, consequences**
- **ask questions when there is dissonance between cultural circles- create new answers to new problems**
  - **technology has caused many new moral problems that require answers – new medical devices**
  - **new discoveries also shift the power relationships**

Ethical "Coordinate System"

Idealism: reality=ideal
Ethics: moral imperatives

Pragmatism: reality=process
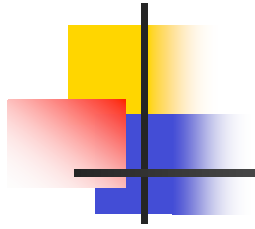**Ethics: relative to situation**

Existentialism:
Reality=self
Ethics: self chosen

RELATIVE

ABSOLUTE

Utilitarianism: reality=material
Ethics: most good for greatest number

Realism: reality is nature
Ethics: natural goodness

Ethics Survey

Your basic moral orientation

Stop and ponder…

- **What are your deepest moral values? What moral qualities do you look for in other people?**
- **Is it ever right to tell a lie? Example?**
- **Recently a student published Cheating 101, a guidebook to teach students how to cheat? What moral issues are involved in publishing this book – should it be sold at campus bookstores? Should the Hatchet advertise it?**

Humans are "moral agents"

- **Cannot escape "morality**
- **Moral sense is part of human-ness**
- **"Instinct- poor" - must learn appropriate behavior**
- **Learn to use intelligence to create solutions with others - create norms
  for all social situations**

The six stages of moral reasoning development (Kohlberg)

[based upon Piaget's earlier cognitive development theory]

- Stage 1) punishment and obedience orientation
- Stage 2) instrumental relativist orientation
- Stage 3) interpersonal concordance of good/bad orientation
- Stage 4) law and order orientation
- Stage 5) social-contract legalistic orientation
- Stage 6) universal ethical principle orientation.

5 R's of ETHICS

- **REASON - abstract, from philosophy, theology, law**
- **REVELATION - religion, enlightenment**
- **RITUAL - celebrations to reinforce moral norms**
- **RE-PRESENTATION - arts, history - to remind culture of moral norms**
- **REFLECTION - ethics always involves self-reflection**
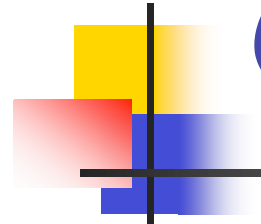
Ethics Perspective #1:

- **<u>Deontological</u>**
    - **based upon duty to do the right thing at all times**
    - **not relative to problem**
    - **clearly defined right and wrong**
    - **look at the action**
    - **Kant – Categorical imperatives: never treat another human being as a means, but always as an end**

Immanuel Kant (1724-1804)

Empirical realism – physical sensation and sense of moral duty

Categorical Imperative:
- **The Formula of the Law of Nature:** "Act as if the maxim of your action were to become through your will a universal law of nature."
- **The Formula of the End Itself:** "Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end."
- **The Formula of Autonomy:** "So act that your will can regard itself at the same time as making universal law through its maxims."
- **The Formula of the Kingdom of Ends**: "So act as if you were through your maxims a law-making member of a kingdom of ends."

Ethics Perspective #2:

- **<u>Teleological</u> –based upon the consequences**
- **utilitarian (greatest good to greatest number)**
- **ends justify the means**
- **right / wrong is relative**
- **look at target or goal**
  Telos - Greek for tail -

Jeremy Betham (1748-1832)

Auto-Icon – his body [with wax head!] preserved according to his will and still on display at University of London College!

Greatest happiness For the greatest number – utilitarian justification for democracy

Defined:
The Moral Point of View

- **Generality – not just one case**
- **Universality – works for all**
- **Priority – levels of value**
- **Disinterestedness – like a judge**
- **Publicity – New York Times test**
- **Impartiality –conflict of interest?**

A second look…

- Do you think right and wrong are absolute?

  Deontological

- Do you think right and wrong depend upon the situation?

   Teleological

- **Write down an example**

"Generic ethical questions to be asked in the context of daily professional practice"

(1) is it honorable?
(2) is it honest?
(3) does it avoid conflict of interest?
(4) is it within your competence?
(5) is it fair?
(6) is it considerate?
(7) is it conservative of time and resources?
(Professional Engineer John McLeod, 1988)

FIVE ETHICS QUESTIONS

"when asked collectively and in sequence, form a
  general framework for addressing and providing
  justification for moral dilemmas"

(1) What makes right acts right?

(2) To whom is moral duty owed?

(3) What kinds of acts are right?

(4) How do rules apply to specific situation?

(5) What ought to be done in specific cases?
  (Bioethicist Robert Veatch, 1977)

Three Ethical Questions

- **What?   aware**

- **So what?   analyze**

- **Now what?   act**

"Computer Specific" Ethical Issues

- **Information repositories/processors**
- **New forms and types of assets**
- **Instruments of acts**
- **Symbols of intimidation / deception**

(Parker, et al., 1988, p. 2)

Unique Aspects of Information Technology with Ethical Issues

- **Intangible nature of electronic information**
- **Increasing dependency of society**
- **Separation of information from the medium**
- **Mixture of information on same media**
- **Plunging costs: value is on data, not media**
- **Huge volume: hard to monitor, audit path**
- **Speed: point of irretrievability is sooner**
- **Complexity: approaching chaos?**
- **Impact of a single electronic transaction**

Next to consider…

- **What is a profession?**
- **Framework for professional ethical behavior**
- **Role of professional Ethics Codes to enable decision-making**
- **Why this is important to you!**

Stop and ponder…

- **What are your deepest moral values? What moral qualities do you look for in other people?**

- **Is it ever right to tell a lie? Example?**

- **Recently a college student published *Cheating 101,* a guidebook to teach students how to cheat. What moral issues are involved in publishing this book? Should it be sold at campus bookstores? Should the GW Hatchet advertise it?**

Is Computer Science a Profession?

- **Examples of professionals: doctors, nurses, teachers, lawyers, engineers, accountants, professors!**
- **What about plumbers, actors, writers, artists, bricklayers, builders?**
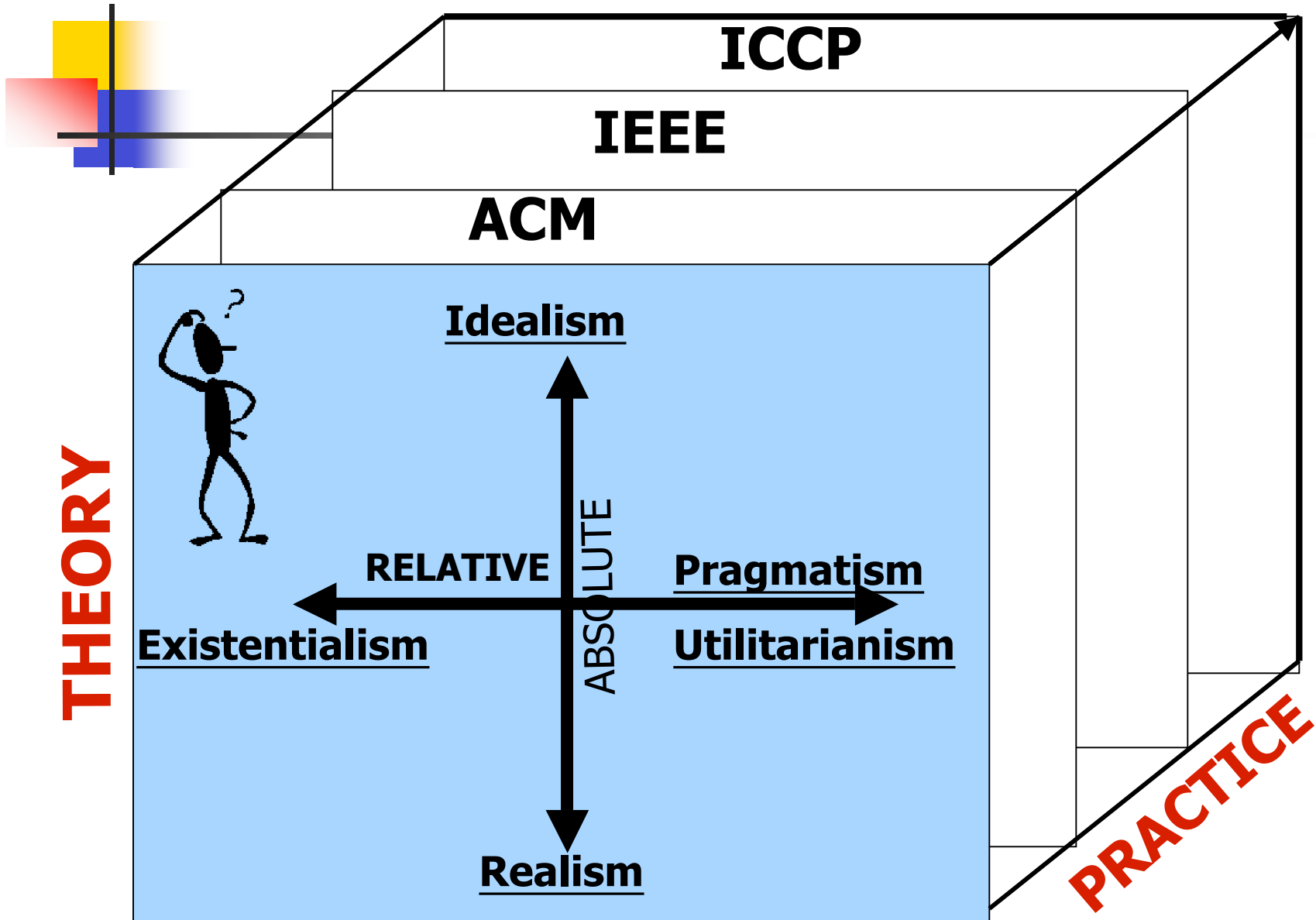- **What is the difference?**

What is a Profession?

- **Specialized knowledge**
- **A "moral community" with shared values and goals**
- **Practitioners of a given skill**
- **Serving a dependent public**
- **Standards established by the group**
- **Self-regulatory**
- **Expulsion provisions**
- **Code of conduct or ethics**

Personal vs Professional Ethics

ICCP

IEEE

ACM

THEORY

PRACTICE

Idealism

RELATIVE   Pragmatism

ABSOLUTE

Existentialism   Utilitarianism

Realism

Three Ethical Models
(Terry Winograd,1992)

- **Angel / Devil Debate - do the right thing**
- **Morality Computer - rule based**
- **Troupe of Jugglers**
  - **engaged activity**
  - **realization of social context**
  - **evolve understandings and practices**
  - **take action**

Discussion Break…

- **A friend asks you to pick out a tie for him to wear to a social occasion. Is this a moral issue? If you refuse, is it immoral or just rude? If you pick out the wrong tie, is it immoral or just a mistake?**

- **What if you pick out the wrong tie intentionally?**

Common Themes in Ethics Codes
(Martin & Martin, 1990)
Emphasis on the relationship of computer professional with *people*, rather than with *machines*.

1. Personal integrity / claim of competence
2. Personal responsibility for work
3. Responsibility to employer/client
4. Responsibility to profession
5. Respect for confidentiality of information
6. Avoid conflict of interest
7. Respect dignity /worth of people
8. Protect public safety, health, and welfare
9. Participation in professional societies
10. Increase public knowledge about technology.

IFIP Framework (1992) for Professional Codes of IT Ethics

Preamble: The IFIP Code of Ethics has been constructed not only for individual Information Technology (IT) professionals but also for multinational organizations and the extended IT community concerned with international legal informatics and related global public policy...The guidelines are global and multi-cultural and are not intended to reflect any particular ideology or creed.

1. Individual Professional Ethics

***1.1 Social Responsibility:* IT professionals strive to use their unique technical expertise to advance international human welfare and the quality of life for citizens of all nations.**

1.2 Protection of Privacy

1.3 Individual integrity

1.4 Professional Competence

1.5 Personal Accountability

2. International Organizational Ethics

2.1 High Performance Standards

2.2 International Standards and Regulations

2.3 International Legal Protection

2.4 Employee Productivity and Quality of Working Life

2.5 User Participation and Feedback

3. Ethics for International Legal Informatics

3.1 Intellectual Property Law

3.2 International Public Law

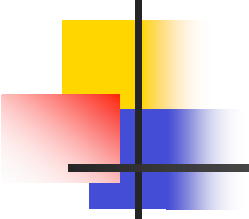*3.3 International Telecommunications Law*

3.4 International Criminal Law

4. International Public Policy Ethics

4.1 Freedom of Communication

4.2 Privacy and Dignity of Individuals

4.3 Humanized Information Systems

4.4 International Computer Literacy (Information Technology Fluency)

4.5 Equitable Opportunity for Information Services

4.6 Cultural Quality of Life

New Ethics Themes in IFIP Ethics Code Framework

1. **Specific statement of social responsibility**
2. **Establishment of international standards**
3. **Emphasis on quality of life**
4. **Protection of intellectual property**
5. **Consequences of networks**
6. **Basic human rights**
7. **Rights of the user**
8. **Equity implications**

Functions of an Ethics Code

- **Enabling document**
- **Source of public evaluation**
- **Professional socialization**
- **Enhance reputation of profession**
- **Deterrent to unethical behavior**
- **Support system to members**
- **Adjudication of controversies**

ICCP Code of Conduct(1990):

2.1 Disclosure of personal bias

2.2 Social Responsibility

2.3 Conclusions/ Opinions based upon expertise

2.4 Identification of expertise

2.5 Integrity

2.6 Conflict of Interest

2.7 Accountability

2.8 Protection of Privacy

ACM Code of Ethics and Professional Conduct (1992)

1. **GENERAL MORAL IMPERATIVES**
2. **SPECIFIC PROFESSIONAL RESPONSIBILITIES**
3. **ORGANIZATIONAL LEADERSHIP IMPERATIVES**
4. **COMPLIANCE WITH CODE**

1. GENERAL MORAL IMPERATIVES

1.1 Contribute to society
1.2 Avoid harm to others
1.3 Be honest and trustworthy
1.4 Be fair and not discriminate
1.5 Honor property rights
1.6 Credit intellectual property
1.7 Respect privacy of others
1.8 Honor confidentiality

2. SPECIFIC PROFESSIONAL RESPONSIBILITIES

2.1 Strive for quality in work

2.2 Maintain professional competence

2.3 Respect for laws on professional work

2.4 Facilitate professional review

2.5 Evaluate impacts and risks

2.6 Honor contracts and agreements

2.7 Improve public understanding of technology

2.8 Access data only when authorized

3. ORGANIZATIONAL LEADERSHIP IMPERATIVES

3.1 Encourage social responsibility

3.2 Manage personnel and resources to enhance quality of life

3.3 Support proper computer uses

3.4 Ensure user input in design of systems

3.5 Protect dignity of users

3.6 Create learning opportunities

4. COMPLIANCE WITH CODE

4.1 Uphold and promote principles of this Code

4.2 Treat violations of this Code as inconsistent with membership in ACM

IEEE Code of Ethics (*Approved August 1990*)

We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree to…

10 IEEE Ethics Principles:

1. Accept responsibility in making engineering 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. Avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;

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

4. Reject bribery in all its forms;

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

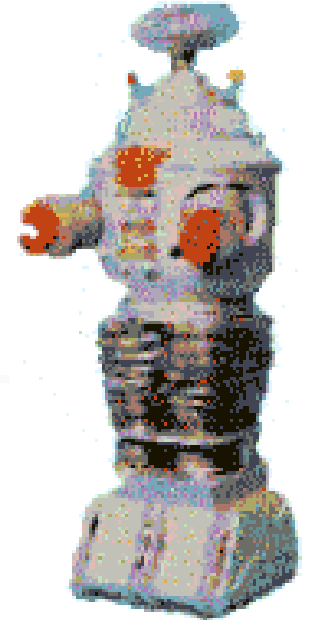# 10 IEEE Principles (continued):
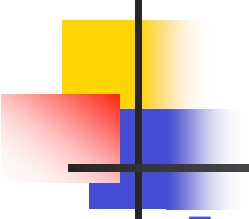
6. Maintain / improve technical competence; undertake technological tasks for others only if qualified by training or experience, or after full disclosure of … limitations;

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

8. Treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin;

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

10. Assist colleagues and co-workers in their professional development;support them in following this code of ethics.

3 Laws of Robotics: Robot Ethics (Asimov)

(1) A robot may not injure a human being or through inaction allow a human being to come to harm.

(2) A robot must obey orders given to it by a human unless the orders conflict with law (1).

(3) A robot must protect its own existence as long as this does not conflict with laws (1) and (2).

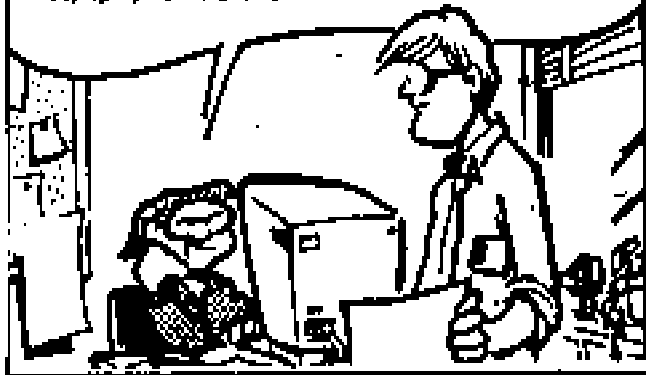# Hacker "Ethics" - the ultimate oxymoron or the new frontier?

- **Access to computers - anything that might teach you something about the way the world works should be unlimited and total**
- **Always yield to the Hands-On Imperative!**
- **All information should be free**
- **Mistrust authority - promote decentralization**
- **Hackers should be judged by their hacking ability not bogus criteria such as degrees, age, position, etc.**
- **You can create art and beauty on the computer**
- **Computers can change your life for the better**

Why Ethics in Computer Science?

Back again …
5-minute essay question

- **Having ethics is described as "moral health." Describe a life that is morally healthy.**

- **Provide examples of people who appear to be <u>morally unhealthy</u> and people who appear to be <u>morally healthy</u>.**

The Ethics Trail….

- **Opportunity**
- **Intention**
- **Relationships**
- **Actions**
- **Consequences**

Three Ethics Questions

- **What?**   aware
- **So what?**   analyze
- **Now what?**   act

Evaluating Ethical Dilemmas

- **What** – the facts of the situation, who is involved, who will be affected, <u>what is the ethical problem?</u>

- **So what** – what are the possible actions and what is outcome for each action?

- **Now what** – using an ethical framework, figure out what is the "<u>right</u>" thing to do?
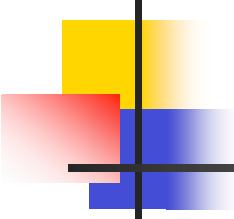
Personal Example 1: Share the Wealth

- **A university student uses an expensive software package as part of a course. She would go to the lab, check out the software, use it, and return it.   One day she made a copy of it to use at home.**
- **A) Should she have made the copy in the first place?**
- **B) If she deletes it at the end of the semester, is it OK?**
- **C) If she does not delete it, is it OK?**
- **D) If she gives a copy to a friend, it is OK?**

Personal Example 2: Hacker Attack

When you returned home from vacation, you looked at your bank statement and saw a large erroneous debit. When you called the bank, you were told it was a computer error that had been corrected.   A month later you read in the Wall Street Journal that the bank had been attacked several times by computer hackers.   Was the bank's action not to tell you the true story ethical?

Professional Example 1: Porn and the Divinity Dean

May 21, 1999 | Earlier this week the Boston Globe reported that Harvard University had asked the dean of its Divinity School to resign after "thousands of pornographic images" had been found on his home computer, which was university property. It seems that during file transfers to upgrade memory on the dean's computer, which kept crashing, a tech-support technician noticed the pornographic material and told his supervisors...

What more do you need to know to evaluate this situation?

Some relevant quotes

- "He explained he had been suffering depression for some time and had been trying to deal with it. He said that he'd been ordered or strongly advised by his doctor to go on leave, to resign from the deanship and return as a teacher."

- Because of the presence of so many image files, the file transfer process took an entire work day, the sources said. When the technician's supervisor inquired why the transfer was taking so long, he did not want to answer, but eventually did, the sources said.

- "Any time there is a question of an employer pursuing the private life of employees it raises some large constitutional issues, and the public debate on this is necessarily a vigorous and hotly contested one."

Related cases...

- "Erik Butler resigned abruptly from his position as the Pine Street Inn's executive director amid allegations that he had stored pornography on his office computer last year.

- Twenty-eight employees were disciplined last month at St. Louis-based Edward Jones & Co., a brokerage house, for sending e-mail that contained pornography or offensive jokes. Another 19 were dismissed.

- On Tuesday, the chief executive officer of Florsheim Group Inc. was forced to resign amid allegations of lewd behavior that reportedly included viewing pornography in his Chicago office.

- Conservative Republican Senator James Inhofe, of Oklahoma, was embarrassed this month when two of his aides had to be disciplined after they downloaded so much pornography onto their office computers that the entire office network crashed." [5]

Professional Example 2: Coy Consultant

- The owner of a small business needed a specialized inventory system. He provided the specifications to a computer consultant and asked if such a system could be implemented. The consultant knew he could do it because he had done much more complicated ones in the past. In fact, he knew this one would have problems, but didn't say anything because he thought he might be hired to do upgrades in the future. Was this ethical?

Professional Example 3:
Let the Customers Debug It!

A software company was producing a new income tax package. The CEO knows that first firm to market will sweep the sales. They widely advertise that the package is coming and release it, knowing it still has some bugs. They put a disclaimer of responsibility on the package and set up a help line. The CEO says it is standard practice for customer feedback to provide into to perfect the next release.

As a result many people get penalized for incorrect tax returns.

Three Ethics Questions

- **What?** aware
- **So what?** analyze
- **Now what?** act