Motivation

- The computer industry is large and far-reaching.
- Ignoring environmental or health concerns has a greater potential to damage society than less pervasive industries.
Codes of Ethics

- ACM Code
  ✦ Manage personnel and resources to design and build information systems that enhance quality of working life.

- IEEE Code
  ✦ Improve understanding of technology; its appropriate application, and potential consequences.

Codes of Ethics

- AITP Standards of Conduct
  ✦ To the best of my ability, insure that the products of my work are used in a socially responsible way.
Codes of Ethics

- Software Engineering Code
  - Approve software only if I have a well-founded belief that it is safe, meets specifications, passes appropriate tests, and does not diminish quality of life, diminish privacy or harm the environment. The ultimate effect of the work should be to the public good.

Environment and Health Issues

- Manufacturing computer products
- Day-to-day use of computer products
- Conservation of natural resources
Manufacturing

- Dangerous chemicals, gases and solvents used in chip fabrication
- Numerous Superfund sites in Silicon Valley
- Design for disposal

Day-to-Day Use

- Repetitive stress injury to the wrist
  - Carpal tunnel syndrome
- Emissions from video displays
  - Eye strain
Resource Conservation

- Consumption
- Pollution
- Economics of unlimited growth

Points to Remember

- Much more is known today about computer industry related hazards.
  - We should be aware of the hazards and how to avoid them.
- Computer product design should consider disposal and conservation
- Short-term expense for “green” processes may yield a long-term gain.
- With the proliferation of computers, repetitive stress injuries are more common.