

NOTES

- ¹ Donald Gotterbarn, "Computer Ethics: Responsibility Regained," *National Forum: The Phi Kappa Phi Forum*, Summer 1991, 71:3; reprinted in Deborah G. Johnson and Helen Nissenbaum, eds., *Computers, Ethics & Social Values*, Prentice Hall, 1995, pp. 18–24.
- ² By Louis P. Pojman (Wadsworth, 1990) and J. L. Mackie (Penguin Books, 1977), respectively.
- ³ Sources used in the preparation of this section include the following: Joseph Ellin, *Morality and the Meaning of Life: An Introduction to Ethical Theory*, Harcourt Brace Jovanovich, 1995; Deborah G. Johnson, *Computer Ethics*, Prentice Hall, 2nd ed., 1994; Louis Pojman, *Ethical Theory: Classical and Contemporary Readings*, 2nd ed., Wadsworth, 1995 (which includes John Stuart Mill's "Utilitarianism," Kant's "The Foundations of the Metaphysics of Morals," and John Locke's "Natural Rights"); and James Rachels, *The Elements of Moral Philosophy*, McGraw Hill, 1993.
- ⁴ John Stuart Mill, *Utilitarianism*, 1863.
- ⁵ Some goals appear to be ethically wrong in themselves, for example genocide, although often it is because the only way to achieve the goal is by methods that are ethically unacceptable (killing innocent people).
- ⁶ Kenneth C. Laudon, "Ethical Concepts and Information Technology," *Communications of the ACM*, Dec. 1995, 38:12, p. 38.
- ⁷ Philip E. Ross, "The Day the Software Crashed," *Forbes*, April 25, 1994, 153:9, pp. 142–156; see p. 146.
- ⁸ Bob Davis and David Wessel, *Prosperity: The Coming 20-Year Boom and What It Means to You*, Random House, 1998, p. 97.
- ⁹ Roger Boisjoly, quoted in Diane Vaughan, *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA*, University of Chicago Press, 1996, p. 41.
- ¹⁰ Charles Piller, "The Gender Gap Goes High-Tech," *Los Angeles Times*, Aug. 25, 1998, p. A1.
- ¹¹ Bill Gates, *The Road Ahead*, Viking, 1995, p. 78.
- ¹² See Diane Vaughan, *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA*, University of Chicago Press, 1996, for an analysis of the institutional practices that contributed to the Challenger tragedy. See Robert M. Anderson *et al.*, *Divided Loyalties: Whistle-Blowing at BART*, Purdue University, 1980, for the BART case.
- ¹³ Holger Hjordstvang, quoted in Anderson *et al.*, *Divided Loyalties*, p. 140.
- ¹⁴ Fire Commissioner Admits Fault Over Radios," Apr. 10, 2001, www.cbsnewyork.com/topstories/StoryFolder/story_1483538055.html; viewed Aug. 15, 2001. The inability of supervisors to communicate with fire fighters inside the World Trade Center (to tell them to leave, because the buildings were going to collapse) was a major factor in the large number of fire-fighter deaths on September 11, 2001. The new digital system had been taken out of service months earlier. Reports said it was unlikely that the digital system would have worked better than the system in use on Sept. 11; an antenna it needed was disabled by debris before the collapse. (Kevin Flynn, "A Focus on Communication Failures," *New York Times*, Jan. 30, 2002, p. A13.)
- ¹⁵ My thanks to my student Anthony Biag, whose questions in class on this issue prompted me to include it in this book.
- ¹⁶ Guidelines of the ACM Code of Ethics and Professional Conduct (Section 1.1).
- ¹⁷ Tom Forester and Perry Morrison, *Computer Ethics: Cautionary Tales and Ethical Dilemmas in Computing*, second edition, MIT Press, 1994, p. 202.
- ¹⁸ Anne Branscomb, *Who Owns Information?*, Basic Books, 1994, pp. 73–75.
- ¹⁹ Marc L. Songini, "Hospital Confirms Copying of Patient Files by Hacker," *Security Informer*, Dec. 14, 2000, www.security-informer.com/english/crd_hospital_316005.html; viewed June 4, 2001.
- ²⁰ Bill Joy, "Why the Future Doesn't Need Us," *Wired*, Apr. 2000; www.wired.com/wired/archive/8.04/

BOOKS AND ARTICLES

Some of the books listed at the end of Chapter 1 also cover ethical issues.

- Robert M. Anderson, Robert Perrucci, Dan E. Schendel, and Leon E. Trachtman, *Divided Loyalties: Whistle-Blowing at BART*, Purdue University, 1980.
- Ronald E. Anderson, Deborah G. Johnson, Donald Gotterbarn, and Judith Perrolle, "Using the New ACM Code of Ethics in Decision Making," *Communications of the ACM*, Feb. 1993, 36:2, pp. 98–107.
- Michael D. Bayles, *Professional Ethics*, Wadsworth, 1981.

- Vint Cerf, "Ethics and the Internet," *Communications of the ACM*, June 1989, 32:6, p. 710. An early attempt to establish a standard of ethics for the Internet.
- W. Robert Collins, Keith W. Miller, Bethany J. Spielman, and Phillip Wherry, "How Good Is Good Enough?" *Communications of the ACM*, Jan. 1994, pp. 81–91.
- Joseph Ellin, *Morality and the Meaning of Life: An Introduction to Ethical Theory*, Harcourt Brace Jovanovich, 1995.
- M. David Ermann *et al.*, eds., *Computers, Ethics and Society*, 2nd. ed., Oxford University Press, 1997.
- Donald Gotterbarn, Keith Miller, and Simon Rogerson, "Software Engineering Code of Ethics Is Approved," *Communications of the ACM*, Oct. 1999, 42:10, pp. 102–107.
- Deborah G. Johnson, *Computer Ethics*, Prentice Hall, 3rd ed., 2001.
- Kenneth C. Laudon, "Ethical Concepts and Information Technology," *Communications of the ACM*, Dec. 1995, 38:12, pp. 33–39.
- Jan Narveson, *Moral Matters*, Broadview Press, 1993. The first chapter gives a good, very readable introduction to moral issues.
- Effy Oz, *Ethics for the Information Age*, William C. Brown, 1994.
- David Lorge Parnas, "Computing and the Citizen: SDI: A Violation of Professional Responsibility," *Abacus*, Winter 1987, 4:2, pp. 46–52.
- Louis Pojman, *Ethical Theory: Classical and Contemporary Readings*, 2nd ed., Wadsworth, 1995. Includes John Stuart Mill's "Utilitarianism," Kant's "The Foundations of the Metaphysics of Morals," John Locke's "Natural Rights," and other classical essays on various ethical theories.
- James Rachels, *The Elements of Moral Philosophy*, McGraw Hill, 1993.
- Richard Spinello, *CyberEthics: Morality and Law in Cyberspace*, Jones and Bartlett, 2000.
- Diane Vaughan, *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA*, University of Chicago Press, 1996.



ORGANIZATIONS AND WEBSITES

- Association for Computing Machinery: www.acm.org
- Computer Professionals for Social Responsibility: cpsr.org
- IEEE Computer Society: www.computer.org
- Herman Tavani, ed., "The Tavani Bibliography of Computing, Ethics, and Social Responsibility": cyberethics.cbi.msstate.edu/biblio