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CODES OF ETHICS

The PART OF THE PICTURE: Ethics and Computing section in Chapter 1 noted that professional societies have adopted and instituted codes of ethics for its members. In this appendix we present summaries of these codes of conduct for computing professionals published by three major organizations: the Association for Computing Machinery (ACM), the Institute of Electronic and Electrical Engineers (IEEE), and the Data Processing Management Association (DPMA). These codes describe the computer professional's obligations to: (1) society, (2) employers, (3) clients, and (4) coprofessionals and professional societies. In a 1990 article, C. Dianne Martin and David H. Martin identify seven common themes in these codes:¹

1. Dignity and worth of other people
2. Personal integrity and honesty
3. Responsibility for work
4. Confidentiality of information
5. Public safety, health, and welfare
6. Participation in professional societies to improve standards of the profession
7. The notion that knowledge and access to technology is equivalent to social power

ACM CANONS OF CONDUCT

Preamble: Recognition of professional status by the public depends not only on skill and dedication but also on adherence to a recognized Code of Professional Conduct. The following Code sets forth the general principles (Canons) followed by professional ideals (Ethical Considerations) . . . applicable to each member . . . An ACM member shall:

Canon 1. *Act at all times with integrity:*

- EC1.1. . . . properly qualify expressed opinions outside the member's areas of competence.
- EC1.2. . . . preface any partisan statement about information processing by indicating clearly on whose behalf they are made.
- EC1.3. . . . act faithfully on behalf of employers or clients.

¹ C. Dianne Martin and David H. Martin, "Professional Codes of Conduct and Computer Ethics Education," *Computers and Society* 20 (1990), 18–29. (Reprinted from *Social Science Computer Review*, vol. 9, Duke University Press, 1990)

Canon 2. *Strive to increase competence and prestige of the profession:*

- EC2.1. . . . encouraged to extend public knowledge, understanding, and appreciation of information processing, and to oppose any false or deceptive statements relating to information processing of which the member is aware.
- EC2.2. . . . not use professional credentials to misrepresent the member's competence.
- EC2.3. . . . undertake only those professional assignments and commitments for which the member is qualified.
- EC2.4. . . . strive to design and develop systems that adequately perform the intended functions and that satisfy employer's or client's operational needs.
- EC2.5. . . . maintain and increase competence through a program of continuing education encompassing the techniques, technical standards, and practices in the member's field of professional activity.
- EC2.6. . . . provide opportunity and encouragement for professional development and advancement of both professionals and those aspiring to become professionals.

Canon 3. *Accept responsibility for own work:*

- EC3.1. . . . accept only those assignments for which there is a reasonable expectancy of meeting requirements or specifications, and shall perform assignment in a professional manner.

Canon 4. *Act with professional responsibility:*

- EC4.1. . . . not use ACM membership for professional advantage or to misrepresent the authority of the member's statements.
- EC4.2. . . . conduct professional activities on a high plane.
- EC4.3. . . . be encouraged to uphold and improve professional standards of the Association through participation in their formulation, establishment, and enforcement.

Canon 5. *Use special knowledge and skills for advancement of human welfare:*

- EC5.1. . . . consider health, privacy, and general welfare of public in performance of work.
- EC5.2. . . . whenever dealing with data concerning individuals, always consider the principle of the individual's privacy and seek the following:
 - ▶ to minimize the data collected
 - ▶ to limit authorized access to the data
 - ▶ to provide proper security for the data
 - ▶ to determine the required retention period of the data
 - ▶ to ensure proper disposal of the data

IEEE CODE OF ETHICS

Preamble: Engineers, scientists, and technologists affect the quality of life for all people in our complex technological society. In the pursuit of their profession, therefore, it is vital that IEEE members conduct their work in an ethical manner so that they merit the confidence of colleagues, employers, clients, and the public. This IEEE Code of Ethics represents such a standard of professional conduct for IEEE members in the discharge of their responsibilities to employees, to clients, to the community, and to their colleagues in this Institute and other professional societies.

Article I. *Members shall maintain high standards of diligence, creativity, and productivity and shall:*

- a. Accept responsibility for their actions;
- b. Be honest and realistic in stating claims or estimates from available data;
- c. Undertake technological tasks and accept responsibility only if qualified by training or experience, or after full disclosure to their employers or clients of pertinent qualifications;
- d. Maintain their professional skills at the level of the state of the art, and recognize the importance of current events in their work;
- e. Advance the integrity and prestige of the profession by practicing in a dignified manner and for adequate compensation.

Article II. *Members shall, in their work:*

- a. Treat fairly all colleagues and co-workers, regardless of race, religion, sex, age or national origin;
- b. Report, publish and disseminate freely information to others, subject to legal and proprietary restraints;
- c. Encourage colleagues and co-workers to act in accord with this Code and support them when they do so;
- d. Seek, accept, and offer honest criticism of work, and properly credit the contributions of others;
- e. Support and participate in the activities of their professional societies;
- f. Assist colleagues and co-workers in their professional development.

Article III. *Members shall, in their relations with employers and clients:*

- a. Act as faithful agents or trustees for their employers or clients in professional and business matters, provided such actions conform with other parts of this Code;
- b. Keep information on business affairs or technical processes of an employer or client in confidence while employed, and later, until such information is properly released, provided that such actions conform with other parts of this Code;
- c. Inform their employers, clients, professional societies or public agencies or private agencies of which they are members or to which they make presentations, of any circumstance that could lead to a conflict of interest;

- d. Neither give nor accept, directly or indirectly, any gift payment or service of more than nominal value to or from those having business relationships with their employers or clients.
- e. Assist and advise their employers or clients in anticipating the possible consequences, direct or indirect, immediate or remote, of the projects, work or plans of which they have knowledge.

Article IV. *Members shall, in fulfilling responsibility to community:*

- a. Protect safety, health, and welfare of the public and speak out against abuses in these areas affecting the public interest;
- b. Contribute professional advice, as appropriate, to civic, charitable, or other nonprofit organizations;
- c. Seek to extend public knowledge and appreciation of the profession and its achievements.

DPMA CODE OF ETHICS

I acknowledge:

1. *That I have an obligation to management*, therefore, I shall promote the understanding of information processing methods and procedures to management using every resource at my command.
2. *That I have an obligation to my fellow members*, therefore I shall uphold the high ideals of DPMA as outlined in its Association Bylaws. Further, I shall cooperate with my fellow members and shall treat them with honesty and respect at all times.
3. *That I have an obligation to society* and will participate to the best of my ability in the dissemination of knowledge pertaining to the general development and understanding of information processing. Further, I shall not use knowledge of a confidential nature to further my personal interest, nor shall I violate the privacy and confidentiality of information entrusted to me or to which I may gain access.
4. *That I have an obligation to my employer* whose trust I hold, therefore I shall endeavor to discharge this obligation to the best of my ability, to guard my employer's interests, and to advise him or her wisely and honestly.
5. *That I have an obligation to my country*, therefore, in my personal business and social contacts, I shall uphold my nation and shall honor the chosen way of life of my fellow citizens.

I accept these obligations as a personal responsibility, and as a member of this Association, I shall actively discharge these obligations and I dedicate myself to that end.