Crossroads
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Introduction

by ***Jeremy T. Lanman***

"Commitment to ethical professional conduct is expected of every member (voting members, associate members, and student members) of the Association for Computing Machinery (ACM) [**1**]."

On October 16, 1992, the ACM adopted the "ACM Code of Ethics and Professional Conduct." This code consists of "24 imperatives formulated as statements of personal responsibility." They address various issues that computing professionals are likely to face. The feature articles in this issue on *Ethics and Computer Science* relate to Section 1 of the ACM code on General Moral Imperatives, and more specifically, to the subsections describing property rights, giving proper credit for intellectual property, and respecting the privacy of others (sections 1.5, 1.6, 1.7, respectively) [**1**].

In the first article, "Using Software Watermarking to Discourage Piracy," Ginger Myles provides insight into software piracy and copyright infringement. She describes how techniques such as software watermarking protect software from piracy by embedding various unique identifiers into programs in order to discourage the illegal distribution of software copies.

Given that many of our readers are university students, the next article is of great

interest. The author, Joseph Nyiri, tackles the issue of music piracy in his article, "MP3 Piracy in a University Setting." Nyiri discusses file sharing and related intellectual property laws such as copyrights on song files. Moreover, he provides the views and opinions of various groups including university students and officials, lawyers and political activists, and the infamous Recording Industry Association of America (RIAA).

Although piracy issues are very important, security is also a major topic in ethical discussions. Thus, we turn our attention to privacy. Much has evolved in the information world as a result of the September 11, 2001 terrorist attacks on the US. These changes are, more specifically, in terms of increased intelligence data and communications monitoring. In her article, "Multilevel Security: Privacy by Design," Stephany Filimon provides insight into protection of privacy, and describes various models that may be used to find patterns in data in order to identify user behavior while preventing access to specific individual user profiles. Furthermore, she explains how various ethical issues are debated between political figures, policy groups, the intelligence community, and civil rights activists.

Nearly ten years ago, *Crossroads* featured the interview, "Should Computer Scientists Worry About Ethics? Don Gotterbarn Says, 'Yes!'," in an issue on *Computers and Society*. At that time, one of our editors, Saveen Reddy, interviewed Professor Don Gotterbarn, a computer and information science professor at East Tennessee State University. Gotterbarn described the many issues on ethics in computer science and their social concerns at that time. It is interesting to notice that many of the same concerns on moral responsibility ten years ago continue to be relevant today.

As demonstrated in our feature articles, there are many issues that are constantly debated in the realm of ethics in computer science. Living in the Information Age, we will all have to face issues of intellectual property, piracy, and privacy not only as computing professionals, but as responsible citizens of our society.

We hope that you enjoy this issue on *Ethics and Computer Science*, and that you in turn visit us on the Internet at **http://www.acm.org/crossroads** to read the additional online-only article, "Ethical Lessons Learned from Computer Science," by Richard Bergmair. In his article, Bergmair addresses various general questions and answers regarding ethics in computer science today, and the many lessons learned.

References

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Association for Computing Machinery. *ACM Code of Ethics and Professional Conduct*. <**http://www.acm.org/constitution/code.html**> (October 1992).

Biography

Jeremy T. Lanman (**lanmanj@acm.org**, **http://www.elanman.org**) is currently a systems engineer at Lockheed-Martin Corporation in Washington, D.C., and an adjunct professor in the Information and Software Engineering department at George Mason University in Fairfax, VA. He will continue with PhD studies in Spring 2004. He earned an MS in Software Engineering from Embry-Riddle Aeronautical University in Daytona Beach, FL in April 2003, and a BS in Computer Science and Mathematics from Butler University in Indianapolis, IN in May 2001. Jeremy's research interests include software engineering concepts, real-time systems, requirements engineering and software architecture. Jeremy currently serves as Managing Editor of Crossroads.