

# TEACHING ABOUT PROFESSIONALISM AND ETHICS

## IN A COMPUTER SCIENCE COURSE

L. Vincent Edmondson

Central Missouri State University

**I. Introduction.** Professionalism and ethics are topics that are rarely discussed in a computer science course, yet they must be dealt with on a daily basis by professional computer scientists. I believe that computer science educators have a responsibility to teach about and discuss the ethical dimensions of computer science. Please note that I am not a philosopher and that this paper is not intended to be a philosophical treatise. Instead, it is intended to provide an outline that can be used to incorporate the topics of professionalism and ethics into a computer science course.

The motivation for teaching about professionalism and ethics is two-fold. Primarily, it is to provide a sound basis for ethical decision making as a professional. Secondarily, it is to try to eliminate incidents like the recent Internet worm.

Ideally, computer ethics should be a required course in the undergraduate computer science curriculum. This paper takes a more pragmatic approach by discussing a suggested outline for introducing the topics in one or two class periods.

**II. Suggested Outline.** This section of the paper contains a suggested outline for introducing the topics of professionalism and ethics. It has been successfully used in classes ranging from 20 to 130 students. These students ranged from first-semester freshmen to graduate students.

The time spent on ethics will be beneficial if the students understand that there are very few clear-cut answers and if they are encouraged to participate in the discussion. Pedagogical treatment of these topics is boring for both the instructor and the students.

The following outline contains four areas (labeled A–D) that should be discussed. It is important to keep in mind that this is merely an outline. Effective presentation of this material involves the use of ‘real-world’ examples that help to make the abstract notions more concrete.

### A. Define and Discuss Professionalism.

Many students, when asked, say that they are aspiring to become professionals. They will also admit to having a very fuzzy notion about the definition of a professional. The following material, excerpted from [1], is intended to help students better understand what it means to be a professional. It should be presented in a way that helps motivate the students to learn about professional ethics.