

Code of Ethics for Computer Science and Engineering

Written By: Kurt Davis, Katelyn Gilhooly, Nicholas Pellegrino, Mikel Kota

Preamble:

The following is a newly formulated Code of Ethics prepared for Notre Dame Computer Science and Engineering. This Code of Ethics are intended to apply to all students, faculty, and staff of the Notre Dame Computing community.

The Code's purpose is to present a template for ethical and beneficial behavior, and thus to aid in ensuring that said community upholds the values upon which the University of Notre Dame was founded. It pertain both to our academic activities and daily lives as positive representatives of our University, our College, our field of study, and our ideals.

This Code is comprised of 14 key points intended to guide each member of the Computer Science and Engineering community in regards to personal and professional conduct. Some are explicitly concerned with computing, and some are meant to shape actions outside of the workplace for the betterment of the general community.

The Code is divided into 3 sections. Section 1, The General Guidelines, consists of guidelines to govern our everyday lives. From when we wake up in the morning to when we go to bed at night, it is our responsibility and promise to Notre Dame to live ethically, with good purpose, and in search of knowledge. Section 2 outlines Professional and Group Ethics. The Notre Dame standard of professional responsibility emphasizes integrity, collaboration, and collective learning to develop teamwork skills that extend beyond the classroom setting. These ideals are especially true in situations where Notre Dame students work collaboratively in group projects. Maintaining a sense of respect for other students and the Notre Dame community as a whole fosters a rich academic environment. By evaluating differing opinions, students will cultivate a more productive and collaborative environment for all students to succeed. Section 3 addresses specific ethical questions in computing at large and the proper response to be given by a member of the Notre Dame CSE community.

Like any ethical code, this Code should be a guide to internalize, not to rely on at face value. An ethical Computer Scientist or Engineer will attempt to apply the intention and principle behind each point to any moral questions not directly addressed.

1. General Guidelines:

1.1 Treat everyone equally and respect their thoughts and ideas. Everyone should be given equal opportunity to express their thoughts, opinions, and ideas without fear of embarrassment or belittlement.

1.2 Have purpose in everything we do. In all endeavors, we strive to improve our personal and professional development while improving our world.

1.3 Listen with diligence. We will listen to our professors, advisors, and peers earnestly. We are here to learn and gain knowledge that will benefit us in our future endeavors so it is our responsibility to take advantage of everyone's wisdom.

1.4 Express hospitality to everyone you meet. Notre Dame is our home and we should be welcoming to everyone and embrace others to our community with open arms.

1.5 Represent Notre Dame with pride on and off campus. While on and off campus, we represent the Notre Dame name and community. Those we meet should be left with a good feeling after meeting us and therefore left with a good feeling about Notre Dame.

2. Professional and Group Ethics:

2.1 Academic honesty is a testament to our character. The Notre Dame standard of professional responsibility requires students to maintain a sense of integrity in the development of their work. Any plagiarism or copying from other people's original work goes against Notre Dame's standard that we uphold as a community. Maintaining a sense of respect for other students and evaluating their opinions will cultivate a more prosperous and academic environment for our students to succeed.

2.2 Communication. Group work requires that team members are communicating effectively and efficiently. We are to communicate with each other in a timely manner and keep other team members updated with their progress.

2.3 Diligence. Group members are to complete their portions of the project with reasonable diligence and not expect other team members to account for any deficiency with the work product. We are encouraged to reasonably assist other members that require assistance.

2.4 Collaboration. Collaboration entails taking all reasonable efforts to complete the project. If a dispute arises, we should have a respectful and constructive discussion to come to a reasonable resolution.

3. Computing Technology:

3.1 Data Pertaining to Others

A. As the market value of user data soars, the urge to collect data is growing among technology companies across the world. This data, collected via both voluntary and involuntary means, must still be controllable by the user. In the event a Notre Dame CSE community member develops such a software product, the member must ensure that the user is able to access collected personal data and to petition the member for amendment and/or deletion of such data if needed.

B. Additionally, the member has the imperative on his or her shoulders to protect the data and all transmissions of it. In all cases of user data collection, when the user surrenders data to the member's product, the user agrees that the member may profit from such data on the condition that the data is being properly secured. It then becomes the duty of the member to uphold this agreement.

3.2 Use of Software as a Weapon

A. The ability for computing technology to contribute to weaponry, defined as any means to harm, destabilize, or otherwise compromise the integrity of any person, property, or system, has alarmingly evolved with time. As a response, we affirm that in any case of malicious use of computing, the member using such computing must act in firm assurance that the act will further the betterment of society and enforce the ideals

of this Code. Exempting cases involving the benign testing of current systems, all other uses of malicious computing is strictly prohibited.

B. Additionally, we must be vigilant of cases of malicious computing and has the imperative to intervene with rational means to cease or at least urge for the reevaluation of such computing.

3.3 Effect of Software Use on Society

As computing technology reaches into the hands of every person on Earth, we are developing more than software; we are forming tomorrow's society with every line of code. To that extent, it becomes the responsibility of the member producing such software to monitor, or urge for the monitoring of, usage of the software from a societal level. As the software pervades society, the member must be keen to observe its effect on society and the human experience, and if the member determines an issue exists, the member must reasonably intervene to enact beneficial change.

3.4 Respect of Intellectual Property

At the intersection of technology's access and progress is a jarring collision of interests. The question of justice emerges when the producer of life-changing technology offers it for a relatively high price for those who request it. In response, we affirm that justice is guaranteed only when the producer voluntarily provides it to those requesting its access. However, it is permissible, if not imperative, that in such a situation, a member petition the producer to amend terms to allow use of the software to the entity in need.

3.5 Openness and Equality of Opportunity

As a community of achieved individuals, we believe in a strong meritocratic system. However, with the opportunities we earn, we must be mindful of those who could not secure such options. Therefore, it becomes imperative of each member of the Notre Dame CSE community to give back by furthering the advancement of computer science education among those of all ages and experiences. By giving back in this way, we strive to ensure equality of opportunity and further strengthen the meritocratic ideal.