

# University of Notre Dame Computer Science and Engineering Code of Ethics

## Section 0 - Preamble

Commitment to honesty, integrity, and professional conduct is expected of the University of Notre Dame student body. This includes both undergraduate students and graduate students. While Du Lac exists for the purpose of protecting the general student body, it is important that we also establish new rules as well as articulate existing rules to govern the students in the Computer Science and Engineering Department.

The following code of conduct consists of 14 rules which describe the personal responsibility of students at Notre Dame. The document attempts to contain as many issues as possible that students are likely to confront in their time at Notre Dame, though obviously it would not be feasible to cover all possible issues. In these rare cases, one should practice good judgment and, if necessary, consult the code of conduct and carefully reason as to what action would fit into the spirit of the code.

Additionally, there are elaborations on each rule for further explanation of the rule's exact meaning as well as to clarify exactly what it means to follow the rule correctly. If any of these supplementary explanations of the rules are deemed inadequate by a student, he or she should contact a department authority with a suggested addition or revisal. Such a request should only be filed after a student has given great thought about the exact problem that he or she has with the current explanation given. It is also worth noting that the primary purpose of this code of ethics is to guide the moral decisions of students during their academic careers at Notre Dame. It is possible, however, that students use the code as a set of guidelines for deciding under which circumstances a formal complaint should be filed against a faculty member or a fellow student.

Although not all of the rules in the code of conduct explicitly apply to computing, students in the Computer Science and Engineering Department at Notre Dame should consider how the rules may apply to them as students in computing. Any ambiguity is an inherent result of the desire to keep the focus on the ethical and moral principles and less on specific circumstances under which the guidelines apply. If ever there are questions as to what this connection should be, students should consult a trusted faculty member.

This document is comprised of four sections. Section 1 includes general guidelines for students while Section 2 dives into the responsibilities of individual students. Section 3 then addresses aspects of student leadership and group work. Finally, Section 4 covers why students should comply with this code of ethics.

## Section 1 - General Guidelines

*As a Notre Dame Computer Science and Engineering student, I will ...*

### **1.1 Code for good.**

Every piece of code a student creates should have some underlying beneficial and helpful purpose. The scale of this helpfulness can vary. A program can provide as simple help as automating some monotonous process, creating a fun time for a user in a video game, or it can be so helpful that it solves an overarching problem that affects millions of people. The main purpose of any piece of code should always be for good.

### **1.2 Take action to avoid harm to others.**

It is not only sufficient to avoid harm to others, but it is imperative to be active in avoiding harm to others. A truly ethical computer science student will take steps to make sure whatever they are creating is not bringing harm to others, nor could aide someone in harming others. To do this, the student should ensure any created program cannot be used for malicious and unintended purposes. The student should be actively thinking about these unintended purposes while creating any piece of code.

### **1.3 Give credit where credit is due.**

Good code is, by definition, both usable and reusable. With this in mind, a student might use a piece of code from another programmer to help solve a bigger problem. This practice is acceptable when proper credit has been given to the original author of the code. Students must also take into consideration the Notre Dame Honor Code, and all the policies that are a part of it.

### **1.4 Respect the privacy of others.**

Coding has immense power, and with that power, comes responsibility. Coding has the power to enter poorly-protected systems, and access confidential information. It is the coder's responsibility to both make sure client information is protected when it is collected and stored, and to inform a system owner if it is found that their system insufficiently protects confidential information.

## Section 2 - Student Responsibilities

*As a Notre Dame Computer Science and Engineering student, I will ...*

### **2.1 Strive for academic success.**

Every Notre Dame student should be a regular attendee at class regardless of whether or not attendance is required. In addition, A Notre Dame student puts forth a wholehearted effort towards participation while in class and homework completion while outside of class. This also applies to doing one's fair share of work in a group, which is laid out further in Section 3.

### **2.2 Know and respect the rules pertaining to coursework.**

This primarily means every student is to follow the Notre Dame Honor Code. This includes many rules but emphasizes that "as a member of the Notre Dame community, I will not participate in or tolerate academic dishonesty." Beyond the honor code, students are expected to abide by additional rules set forth by each professor of each class. In computer science classes collaboration is generally encouraged, but directly viewing another student's program is usually prohibited. If a student feels a rule is unethical, he or she has an obligation to discuss the rule with a professor and/or academic supervisor.

### **2.3 Engage in quality peer review.**

Projects or papers are part of the required coursework in many Notre Dame courses, with programming projects being especially common in computer science classes. With this usually comes the requirement of reviewing the work of a peer. When performing these reviews, students are expected to put forth the same kind of effort in peer reviews as one would in their own coursework. Also, a student must disregard his or her own personal bias and respect the integrity of the classroom. On the opposite side, when receiving a review a student would respect the constructive criticism of a fellow student and use the ideas presented in the review in order to improve future coursework.

## Section 3 - Group Work and Student Leadership

*As a Notre Dame Computer Science and Engineering student, I will ...*

### **3.1 Work only in groups when specified.**

Many assignments allow for group work at Notre Dame, but there are some caveats as to how individuals may work together. Collaboration of high level ideas is allowed and encouraged unless expressly forbidden by the instructor in the syllabus or for a specific assignment. However, looking at another individual's screen or code is forbidden unless expressly allowed by the instructor in the syllabus or for a specific assignment.

### **3.2 Appeal for group work when collaborative learning would be more productive than individual learning.**

While some assignments are best completed individually, many problems in the real world are solved collaboratively. The task may have a much larger scope than one person, or another may have useful information to complete the project. As a student of computing, it is necessary to understand when learning as a group would be most beneficial and then appealing to the instructor to make it so. It is important, though, to only do so if it is for the sake of learning and not to lessen responsibility or work.

### **3.3 Contribute equally to the project.**

Projects require extra effort and coordination in order to be successful. As a student of computing preparing to enter the workforce, it is imperative to contribute fairly to the group work. This includes both ensuring that other group members don't have to do extra work and ensuring that you do not do all of the group work yourself. Contributing equally will produce a sound product, and each group member will benefit from the experience.

### **3.4 Use positions of leadership as opportunities to make coders better than before.**

As undergraduate students, there are many opportunities to tutor and assist younger students. It is important that tutors understand prior shortcomings and pitfalls to prevent the next class of coders from making the same mistakes. If each graduating class of coders is better than the year prior, the leaders of prior classes have successfully mentored. Leaders in computing must work diligently to both provide guidance and support, but also to not micromanage problems and stifle creativity.

### **3.5 Mentor not for the grade but for intellectual gain.**

Younger students look to their leaders for guidance and clarity with respect to specific classes and homework. It is the duty of each leader in computing to ensure that the guidance offered is for intellectual gain and not just for the student to make a certain grade. It is easier to just give the answer, but truly teaching the material is what must be done.

## **Section 4 - Compliance with the Code**

*As a Notre Dame Computer Science and Engineering student, I will ...*

### **4.1 Uphold and promote the principles of this code of ethics.**

The quality of the education of any particular student depends not only on his or her self, but also on that of the other students. As such, each person has a responsibility to the other students to give a complete and honest effort into their studies. It follows then, that each student must also follow the rules given in this code of ethics, as its purpose is not only for the protection of students' rights and dignity, but also for the protection of each student's education.

### **4.2 Properly attend to observed violations of the code.**

As students of the University of Notre Dame, and more specifically as students of this department, participation in this code is not a voluntary matter as some other codes of ethics are. Though certain aspects of it may be difficult to enforce, if any student chooses to not follow this code in a severe enough manner, the student may be removed from the Computer Science and Engineering Department and/or the University of Notre Dame.