**Ethical Design and the Philosophy of Technology**

*Overview*: One of the timeless questions in philosophy of technology is the question regarding the relationship between humans and technology. This module draws upon the mediation theory of technology developed by Peter-Paul Verbeek to explore the ethical aspects of design in computer science. Through reading, discussion, small group work, and applied exercises, students will develop conceptual and practical knowledge about ethical design practices in their field.

*Learning Goals*:

Students will understand the basic concepts of ethical reasoning and apply those concepts to concrete examples in computer science.

Students will consider the ways in which designers build certain values into various digital technologies.

Students will become familiar with mediation theory and examine the ways in which technology creates human relationships.

Students will reflect on their own experiences with using and designing technology and how values played and play a role in their own experiences and projects.

*Key Questions*:

How does mediation analysis help us understand the value assumptions that inform existing technologies?

How can mediation analysis help us anticipate the ways in which value assumptions will inform technologies under development?

To what extent can computer scientists control the ethical implications of their creations?

What are the three types of human-technology relations defined by Verbeek and how to they reveal something about technology?

Is it possible and desirable for computer scientists to “design mediations explicitly into products,” as Verbeek argues? What implications does this have for computer science?

*Key Concepts*:

Means and Ends

Technological Neutrality

Technological Pessimism

Mediation Theory & Mediation Analysis

Values of Design

*Activities*: This module consists of two lessons. For Lesson A, students learn about mediation theory by reading a short article for homework and then discussing it in class. Instructors will lead students in discussing the values that inform design and the importance of computer scientists reflecting on those values while projects are in development. For Lesson B, students conduct their own mediation analysis by applying the ideas learned in Lesson A to a relevant and specific computer technology. This lesson provides students with practice assessing the moral values that inform computing technologies so that they may later perform such analyses on their own projects.