Prof. Dr. Ibo van de Poel
Delft University of Technology, Netherlands
Faculty of Technology, Policy and Management
Values, Technology and Innovation

Prof. Dr. Dr. Bjoern Niehaves
Chair of Information Systems, University of Siegen
Forschungskolleg Siegen
Center for Responsible Innovation & Design

"Designing for the Good"
- Value Sensitive Design -

PhD seminar (Doktorandenseminar) – 20th to 21st of March, 2018

Integrating Ethics and Society in Technology Design

It is of major importance for information and communication technology (ICT) projects to address potential ethical and social concerns during the research and design phase. Ethical and social implications of technology (often discussed under the heading "ELSI") typically deal with issues such as privacy, inclusion, autonomy or unwanted side-effects. Besides the traditional technology-driven fields such as human-computer interaction or informatics, many other research fields are equally affected by ethics of technology design due to the increasing penetration of digitization in society. In this PhD seminar you get acquainted with a practical approach to address such issues: *Value Sensitive Design (VSD)*.

The Methodological Approach: Value Sensitive Design

VSD has been developed as an approach in the past few decades and has been successfully applied to several ICT-related research projects. It is recognized and accepted as a research-based methodological approach and offers plenty of publications and publication opportunities. VSD aims at systemically integrating values of ethical importance into the design of new technologies. It demands using different methods and tools to ensure that technology designs are "good" and have a positive, practical impact on society. During the seminar you will get to know the VSD approach and you will practice with applying it to your own research.

Seminar agenda

Topics that will be addressed include how to discern values for your project, translating values into design requirements and dealing with value conflicts. We will also pay special attention to ethical issues in the design of algorithms like algorithmic bias and the creation of filter bubbles.

Tuesday, 20.03.2018		
Time	**Topic**	**Readings**
10.00-11.30	Lecture: Introduction to Value Sensitive Design • What is value sensitive design? • Value sensitive design and responsible innovation	Friedman, Batya, Kahn, Peter H. Jr. & Borning, Alan. 2006. Value Sensitive Design and information systems. In: Zhang, Ping, Galletta,

	• Tools and approaches in value sensitive design • An example of value sensitive design	Dennis, eds. Human-computer interaction in management information systems: Foundations. Armonk, NY: M.E, Sharpe, pp. 348-372.
11.30-12.30	Participants present their research projects Each participant is asked to briefly present his/her research project; pay particular attention to: • Ethical issues • Values that are relevant to the project	
12.30-13.30	*Lunch break*	
13.30-15.00	Lecture: Translating values into design requirements • Discerning relevant values • Value conceptualization and value specification • Values hierarchy	Van de Poel, Ibo. 2013. Translating values into design requirements. In: Mitchfelder, D. McCarty, N. Goldberg, D.E., eds. Philosophy and Engineering: Reflections on Practice, Principles and Process. Dordrecht: Springer, pp. 253-266.
15.00-15.30	*Short break*	
15.30-17.00	Group work on projects Form groups of 3 participants. Each group choses one research or design project (preferably of one of the participants). For this project: • Identify relevant values and stakeholders • Provide a conceptualization of these values • Provide a specification of this values (with the help of a values hierarchy)	
19.00	*Dinner*	
Wednesday, 21.03.2018		
9.00-10.30	Lecture: Value conflict in design • Conflicting values and moral overload • Value incommensurability • Ways for dealing with value conflict in design	Van de Poel, Ibo. 2015. Conflicting Values in Design for Values. In: van den Hoven, Jeroen Vermaas, Pieter E., van de Poel, Ibo, eds. Handbook of Ethics, Values, and Technological Design. Springer Netherlands, pp. 89-116.
10.30-12.00	Group work on projects For the earlier chosen project: • Identify possible value conflicts • Determine possible and preferred ways for dealing with value conflicts	
12.00-13.00	*Lunch break*	
13.00-14.00	Lecture: Ethics in the design of algorithms • Ethics of design of algorithms for self-driving cars • Dealing with algorithmic bias • Filer bubble and echo chambers	Mittelstadt, Brent Daniel, Allo, Patrick, Taddeo, Mariarosaria, Wachter, Sandra & Floridi, Luciano. 2016. The ethics of algorithms: Mapping the debate. Big Data & Society 3.
14.00-15.00	Group presentations	

Application

Please register with Oliver Heger (oliver.heger@uni-siegen.de), deadline is 1st of March. Slots are allocated on a *first come, first served principle* (max 12 participants, room to be announced).