Affective Interaction

PSYCGI15 – 15 Credits

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Module Convenor:
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Module aims and objectives:
The aims of the module are to give students familiarity with a range of methods for informing the design and guide the evaluation of systems (including robots) that are aware of, support or regulate the affective experience of the user.

Module description:
The aim of this module is to introduce students to the emerging field of affective interaction by bringing together research and methodologies from cognitive psychology (affective science) and HCI. One part of the module will aim at giving the students a basic introduction to the theory of emotion from psychology and neuroscience viewpoints and to understand its importance in human decision and communication processes. Particular attention will be dedicated to embodied sensorial experiences. The other part will focus on the challenges in designing and evaluating systems that are capable of affectively interacting with humans. Methods to inform the design, measure and influence the affective experience will be taught. Examples of current applications (e.g. in entertainment, education, health, therapy, rehabilitation, service robotics) will be used to identify problems and design solutions. Finally, the ethical implications (e.g., privacy) of affective interactive systems will be discussed.

Module learning outcomes:
By the end of the module, the students should be able to: apply methods to inform the design of systems that are aware of, support and regulate user affective experience; explain relevant emotion theories and apply them to the design of affective interactive systems; reflect on the implications of taking into account affective experience on design and usability methods from HCI; critically evaluate a designed affective interactive system and relate it to relevant literature and theories in the area.

Knowledge and understanding of: Concepts related to affective processes in humans and to embodied interaction, theoretical affective models and methods to model and design for affective user experience.

Intellectual (thinking skills) – able to: Apply theories of affective processes to practical case studies. Present well founded arguments relating theory to practice.

Practical skills: Informing the design of and evaluating affective interactive systems by reference to relevant theory. Using sensors to measure aspects of emotional experience.

Transferable skills: Group work; Presentation skills; Reflect on design process, Creativity/Innovation, Active Learning, Search for knowledge.

Module schedule: Term 2. Friday afternoon (tbc)

Assessment method: Coursework 2,500-3,000 words

Pass conditions: The single item of coursework must be passed.

UCL Postgraduate Programme in Human-Computer Interaction