



LUND
UNIVERSITY

Faculties of Humanities and Theology

SASH92, Social AI Through the Looking Glass, 7.5 credits *Social AI Through the Looking Glass, 7,5 högskolepoäng* First Cycle / Grundnivå

Details of approval

The syllabus was approved by The pro-dean for First-Cycle Studies at the Faculties of Humanities and Theology on 2022-01-31 and was last revised on 2022-09-12. The revised syllabus applies from 2022-09-12, autumn semester 2022.

General Information

The course is offered as a free-standing course. It can normally be included as part of a first- or second-cycle degree.

Language of instruction: English

Main field of studies

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Depth of study relative to the degree requirements

G1N, First cycle, has only upper-secondary level entry requirements

Learning outcomes

On completion of the course, students should:

Knowledge and understanding

- be able to identify and account for some key psychological and philosophical theories on human social cognition, such as: theories of Theory of Mind, Embodied accounts (4E Model), Direct Neuronal Matching Hypotheses; Philosophy of Action; Enactivism;
- be able to identify and explain main theoretical and methodological differences between contrasting approaches in human social cognition, e.g.: representational and inferential vs. embodied and situated approaches;
- be able to explain some key concepts in AI with reference to social interactions between robots and humans, such as: i) embodied and situated accounts of human-robots interactions; ii) affective and cognitive sciences for socially interactive robots; iii) learning, adaptation and evolution of social cognition in social robots; iv) context awareness, expectation and intention understanding in

social robots; v) interaction and collaboration between robots, humans and environment;

- be able to describe and account for main different research paradigms and models applied in research on human-social robots, such as: virtual peer agents, embodied autonomous systems, human-robot vocal interfaces, Computers are Social Actors (CASA);

Competence and skills

- be able to summarise and contrast arguments for and against standard accounts of human social cognition;
- be able to identify best methodologies and analytical frameworks to be applied in different human-robot interactional contexts;
- be able to critically discuss theoretical and methodological approaches to the study of human social cognition.

Judgement and approach

- be able to provide contrasting examples on interactional situations wherein the presence of social robots vs. humans as partners may be considered as necessary, supportive, or hindering;
- be able to envision future interactional scenarios in which technologically-implemented agents can be meaningfully implemented

Course content

The course is an introduction to social theories in Artificial Intelligence. It aims at drawing engaged reflections and theoretical comparisons between how humans engage in meaningful interactions with other humans and with social robots. Towards this aim, the course will first provide an overview of the standard and contrasting accounts of social cognition and its development, spanning from Theory of Mind, embodied and situated approaches, neural mirroring theories. Mainstream research paradigms to investigate human-robot interactions will be also presented. Finally, the course will advance some current psychological and philosophical critical issues related with ethical, relational and functional issues of using social robots as partners in human daily interactions.

Course design

Teaching consists of lectures, group exercises and lab exercises.

Assessment

Assessment is based on a written assignment prepared at home and an invigilated exam.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, E, D, C, B, A.

The highest grade is A and the lowest passing grade is E. The grade for a non-passing result is Fail. Both components of the examination receive a grade from A to E. The overall grade is determined by the average of these two grades. A passing grade on both components is necessary for a passing grade in the course.

Entry requirements

General requirements for university studies in Sweden

Further information

- The course is given by the Department of Philosophy, University of Lund
- The credits allocated for course content that in whole or in part is commensurate with another course can only be credited once for a degree.
- For further details see the current registration information and other relevant documentation.

Subcourses in SASH92, Social AI Through the Looking Glass

Applies from H22

2201 Social AI Through the Looking Glass, 7,5 hp
Grading scale: Fail, E, D, C, B, A