

Enhancing Social Interaction in Education and Business by using Telepresence Robots

Subject area: Computer Science/ICT

University:	TalTech
Level:	BA all years, MA all years
Teaching mode:	hybrid: some students participate online, other students attend real-life
Instructor(s):	Janika Leoste, Kaido Kikkas, Aleksei Talisainen, Jaanus Pöial, Kristiina Hakk, Meelis Antoi, Martin Rebane, Birgy Lorenz

Short description

The aim is to discover the capabilities of TPR in enhancing social interaction (in different contexts, including education and business) and learn to deploy, configure and extend such robots. The course will consist of six learning experience modules: Video conferencing vs TPR; Social and ethical aspects of TPR; TPR in collaborative learning; Teaching tele-presented students - opportunities and challenges; The technical limitations of TPR; How TPR technically work and how to modify them.

Full description

<https://ois.ttu.ee/aine/ICY0032>

Learning outcomes

After completing this course, the student:

- compares the main differences between videoconferencing and TPR and determine the relevance of TPR in different social interaction situations;
- identifies and analyses (in the form of SWOT or similar) different ethical and social aspects of TPR use (privacy, security, accessibility, countering inequality and prejudice etc);
- identifies and analyses opportunities and challenges when teaching TPR students;
- applies TPR in 'flipped classroom' and collaborative learning situations;
- analyses technical possibilities and limitations of TPR use in different contexts (e.g. human senses);
- describes how TPR robots technically work and is able to extend them with additional hardware and software.

General information

Contact hours per week:	4
Total workload:	156 (in student hours for the whole course)
ECTS credits:	6
Language:	English
Course start date:	21 September 2022
Course end date:	14 December 2022
Add. info about start date:	The course starts on September 21 and lasts for 12 weeks, with 2 weeks for each module.
Weekly teaching day/time:	12 Wednesdays 10:00-13:30 (EST), seminars 4 academic hours 12 Fridays laboratory 2 academic hours between 10:00-16:00., time is divided between 4 groups 4,5 hours independent work with literature and assessment 2 hours team interaction
Time zone:	CET +1 (Estonia, Israel)
Further information:	Maximum amount of participants 20. Four students can participate in each seminar via tele-presence robots and the rest in video conferencing if they do not attend.
Prerequisites:	No
Activities and methods:	Lectures, Seminars, Group work, Lab-work, Self-study, Practices, Exercises, Tutorial sessions
Presence on campus:	Lab work, seminars, final presentations - possible to be telepresented from the distance

Final examination

Form:	project
Date:	14 December 2022
Location/format:	online
Re-sit possibility:	yes
Transcript available:	end of semester
Add. info/requirements:	Additional assignment options 21.12.22, 11.01.23

Registration

To register for this course, follow the registration requirements of your **home university** as specified here: www.euroteq.eu/courses-registration.

Administration

Number of places:	15
Minimum participants:	12
Internal course code:	ICY0032
Contact:	kristel.marmor@taltech.ee

This course is part of the EuroTeQ Engineering University joint course catalogue 2022/2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.