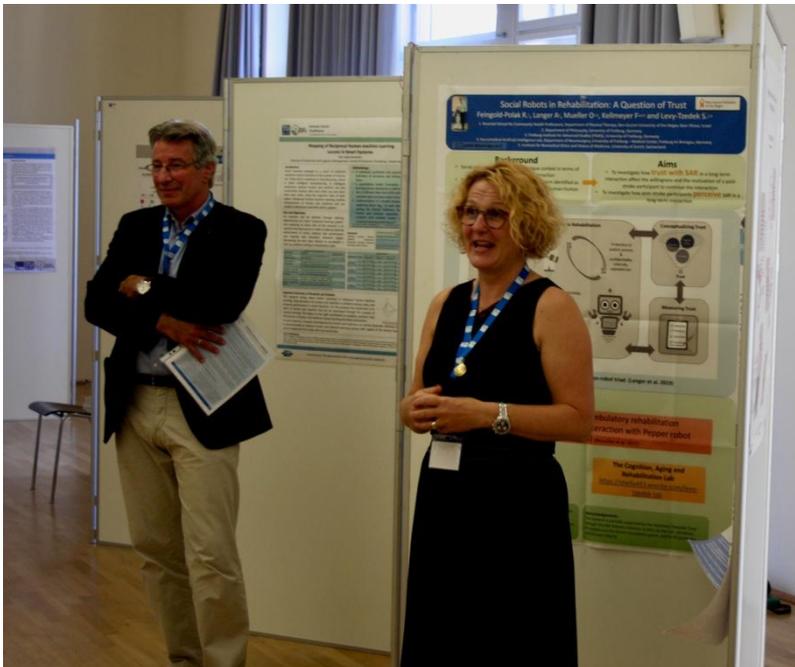


## Report Summer School on TrustRobots

The Summer School on TrustRobots took place from September 15 to 20 at TU Wien with participants from across Europe and elsewhere. The summer school participants enjoyed an intensive week together, sharing perspectives and learning about topics ranging from reliable machine learning to emotion expression in Human-Robot Interaction, all relating to the overall theme "Trust in Robots"

The Summer School Kick-Off event took place on Sunday. The event was opened by Kurt Matyas, Vice Rector of TU Wien, and Univ.-Prof. Sabine Köszegi and Prof. Markus Vincze, the coordinators of the Doctoral College Trust in Robots. All participants and supervisors gathered for a joint poster session, and got to know each other's backgrounds and research fields. A Gin Tonic Robot completed this nice event.



On Monday, the Summer School officially started with the lecture #FAIL by Peter Purgathofer (TU Wien), directly followed by a very interactive lecture by Geraldine Fitzpatrick (TU Wien) that included some team building exercises. In the afternoon, students were provided with a lecture on statistics by Astrid Weiss (TU Wien) and one on machine learning by Peter Auer (MU Leoben).

On Tuesday, we had the pleasure to welcome Prof. Sami Haddadin (TU München) for the lecture "Fundamentals on Human-Centered Robotics". In the afternoon, Franz Wotawa (TU Graz) shared his knowledge on how to test AI-based systems. Afterwards Prof. Sabine Köszegi (TU Wien) introduced the ethical guidelines as proposed by the High-Level Expert Group on Artificial Intelligence of the European Commission.

Before having dinner, Prof. Sabine Köszegi and Ao. Prof. Markus Vincze gave the participants a short tour of the city center of Vienna. Afterwards, they enjoyed typical Viennese food at a *Heuriger* in the 19<sup>th</sup> district.



On Wednesday, participants attended two more interesting lectures on “Safety”, provided by Dr. Michael Zillich (Blue Danube Robotics) and Dr. Michael Hofbauer (Joanneum Research) at Pilotfabrik. In the afternoon, the participants worked hands-on with collaborative robots during the workshop on Intuitive Programming.



The next day, the participants took part in a scenario prototyping competition. They had to come up with a scenario with a cocktail-serving robot in teams of four to five people and prepare a video clip. The videos were presented on Friday afternoon and ranked by a jury of supervisors, which was a tough job, as the videos all were of high quality and very creative! The winning team was awarded with a small robot-related prize ;)

The last lecture session was provided by Malte Jung (Cornell University) on Friday morning. He talked on the topics “Emotion Expression in HRI” and “Human-Robot Interaction in Groups and Teams” which were both actively discussed by all



participants (which might be considered surprising, as it was the last day and the Farewell Dinner the night before had run on late in the evening! ;-)).

Finally, we want to especially thank our cooperation partner TU Austria as well as our sponsors GMAR and Blue Danube Robotics for providing the resources to make this Summer School happen! Thank you!

Special thanks to all colleagues, who were teaching! We very much enjoyed the lectures!

Many thanks to our photographer Glenda Hannibal!

Below we want to share some feedback to the question what participants liked best on the Summer School:

*"Great team of people, teachers and participants."*

*"Having the chance to get along with people who share the same professional interests"*

*"The talks were really inspiring and motivating. It was great to meet so many researchers - students and professors - from so many disciplines and countries. The different views really gave the bigger picture of trust in robotics. Thank you for that. For the organizers and staff: Thank you very much for organizing this event. Also, Peters HRI video competition was really cool as we got to work in teams and be creative. Panda programming was nice as well. Food was great!"*