16:45 Questions pour un robot coopératif : quoi, qui, où, quand, comment ? Questions for a cooperative robot: what, who, where, when, how?

Rachid Alami, LAAS-CNRS, Toulouse



Most robots have to cooperate. This is true in multi-robot systems and also for contexts where a robot has to act in presence or in synergy with humans.

We will discuss a number of problems that such robots have to deal with when confronted to questions such as what action to perform, who will perform it, who will it concern, and also where, when and how the action should be carried out. I will pick some examples from various contexts and show how they gave birth to interesting research topics on control architectures, as well as on task and motion planning.

Rachid Alami is a Senior Scientist at LAAS-CNRS. He obtained an engineer degree in Computer Science in 1978 from ENSEEIHT, and a Ph.D in Robotics in 1983 from University Paul Sabatier in Toulouse. He received his *Habilitation à Diriger les Recherches* in 1996. He contributed and took important responsibilities in several national, European and international research and/or collaborative projects (EUREKA: FAMOS, AMR and I-ARES projects, ESPRIT: MARTHA, PROMotion, ECLA, IST: COMETS, COGNIRON, France: ARA, VAP-RISP for planetary rovers, PROMIP). His is involved in several FP6/FP7 IST projects as well ANR projects. His main research contributions concern the fields of robot architectures, task and motion planning, multi-robot cooperation, and human-robot interaction.