

전자전기컴퓨터학부



1. 제 목 : Networking and Communication to Enable Cooperative Robotics

- 2. 발표자: Prof. Matson
- 3. 일 시 : 2012년 12월 14일(금) 13:30 ~ 14:30
- 4. 장 소 : IT-1호관 318호
- 5. 초청교수 : 김민영 교수

6. 강사약력 :

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7. 내용요약 :

The M2M Laboratory maintains that the future in the enhancement of robotic functionalities lies not only in the mechanical and electronic improvement of the robots' sensors, mobility, stability, etc., but also, if not mostly, in their ability to connect to other actors (human, agents, robots, machines, and sensors = HARMS), to communicate with them, to coordinate their goals, to optimize the division of labor, to share their intelligence, to be fully aware of the entire situation, and thus to optimize their fully coordinated actions. Accordingly, the robots of the future will be equipped with the ability to network and communicate with each other as well as humans in a natural language, such as English and/or Korean.

To allow communication, robots must network and establish communications. Specifically rapid establishment of point-to-point robotic networks across long distances and complex environments, must be initiated and organized by the robots. In this seminar, we show how the use of techniques such as genetic algorithms and particle swarming will be used to autonomously construct long-range robotic networks, within the HARMS robotic model.

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