



MAS: From Practical Applications to Used Elements of Theory

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Joi 27.09, ora 14:00, în amfiteatrul PRECIS are loc prezentarea Multi-Agent Systems: From Practical Applications to Used Elements of Theory, oferită de Yves Demazeau, Directeur de recherche la CNRS. Vă invităm să participați.

POLITEHNICA UNIVERSITY OF BUCHAREST

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MAS: From Practical Applications to Used Elements of Theory

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Abstract

Multi-agent systems (MAS) have now existed for more than 25 years. In the first 10 years, the community was asked to build usable MAS. In the following 10 years, it was asked to build useful MAS... It is now the time to build MAS that are regularly used. This talk is willing to bridge the gap between methodology and practice of used multi-agent systems. We first discuss the VOWELS MAS paradigm introduced for design purpose in the 90's. We show how it has evolved from design to programming towards multi-agent oriented programming. Such a traditional way of design and programming multi-agent systems has been highly successful and we illustrate this with different examples including cartographic generalization, luggage handling, geomediatric news analysis and biorobotics. We then argue that the design of used MAS can be very different depending of the application domain, which requires a better attention to the end-user and grounds on limited elements of the theory. We discuss the role of the end-user within the VOWELS paradigm and we exemplify it in the domain of interactive games. We illustrate it through examples including decentralized assistants, intelligent playgrounds, artistic creation, and health informatics. Playing with the vowels and including the end-user is not only an intellectual exercise; it also contributes to the evolution of computing towards creativity concerns, and more generally to the service to the person. This line of thought is driving our agenda of research work for the next years as well as it ethically drives the MAS community towards practical applications.

Yves Demazeau

Yves Demazeau received his PhD in Computer Science at INP Grenoble Institute in 1986. He has been distinguished ECCAI Fellow in 2010 and Doctor Honoris Causa at University of Southern Denmark Odense in 2017. He is Director of Research at CNRS since 1988, and Invited Professor at USD since 2002. Yves Demazeau is one of the founders of the Multi-Agent Systems (MAS) area. He has edited 37 books or proceedings, has authored or co-authored 187 papers and has been invited for 50 lectures, 22 tutorials, and 176 seminars. He has (co-)advised 55 MSc students and 28 PhD students and served in 271 conference program committees. He is conducting the PAAMS series since 2009 and the National AI Platform PFIA since 2013. He is Editor-in-Chief of the French AI Journal (RIA) since 2010 and President of the French Association for Artificial Intelligence (AFIA) since 2011.

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