



Séminaire ISIR

Prof. Dr. Jianwei Zhang

Institute TAMS (Technical Aspects of Multimodal Systems)

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Lundi 25 Juillet 2012 à 09h30

Campus Jussieu, 4 place Jussieu, Paris
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“Layered Learning in Cognitive Service Robot Systems”

Abstract:

In a dynamic and changing world, a robust and effective robot system must have adaptive behaviors, incrementally learnable skills and a high-level conceptual understanding of the world it inhabits. I will first introduce the concept of incremental learning approaches, with consideration of applications of intelligent service robot systems, e.g. in medical assistance, rehabilitation, home service, and edutainment, etc. I will then introduce a framework for representing robot experiences, planning and learning. Results are integrated and evaluated in operational mobile platforms with grasping facilities.

Jianwei Zhang is professor and head of TAMS, Department of Informatics, University of Hamburg, Germany. He received both his Bachelor of Engineering (1986, with distinction) and Master of Engineering (1989) from the Department of Computer Science of Tsinghua University, Beijing, China, and his PhD (1994) at the Institute of Real-Time Computer Systems and Robotics, Department of Computer Science, University of Karlsruhe, Germany. His research interests are robot learning, bio-inspired control, novel sensing devices, service robotics and multimodal human-computer communication. In these areas he has published about 300 journal and conference papers, technical reports, four book chapters and two research monographs. He is the coordinator of the German-Chinese (Hamburg-Tsinghua) International Research Training Group CINACS, PI of the BMBF project IVUS “Intelligent Vision Systems for Service Robots”, the coordinator of the EU FP6 MING-T Project and FP7 project RACE. He has received several awards, including the IEEE ROMAN Best Paper Award in 2002 and the IEEE AIM Best Paper Award 2008. He is the General Chairs of IEEE MFI 2012 and IROS 2015.

Sous la co-tutelle de