

电子信息与电气工程学院

School of Electronic, Information and Electrical Engineering

学术报告会 Seminar Announcement

题 目: Making Good Decision Quickly

时间: 2017年5月14日上午10:00-11:00

地 点: 微电子楼 306 会议室

报告人: Sven Koenig



报告摘要:

Several disciplines, including artificial intelligence, operations research and others, study how to make timely and good decisions. In this talk, I argue that it is possible to combine ideas from these disciplines, which often requires serious technical advances to reconcile their different assumptions and approaches in a way that results in synergy between them. I use artificial intelligence as a starting point and give examples from our current and past research to illustrate how to do that. For example, I talk about how to combine ideas from artificial intelligence and utility theory to create the foundations for building decision-support systems that fit the risk preferences of human decision makers in high-stake decision situations better than current systems, how to combine ideas from artificial intelligence and economics to build teams of robots that use auctions to distribute tasks autonomously among themselves, and how to combine ideas from artificial intelligence and theoretical computer science to replan quickly. I then discuss recent developments in the artificial intelligence community to move toward creating a general decision-making discipline, so far mostly for autonomous systems.

报告人简介:

Sven Koenig is a professor in computer science at the University of Southern California. He received his Ph.D. degree in computer science from Carnegie Mellon University in 1997, and was a program director at the National Science Foundation from 2010 to 2012. Most of his research centers around techniques for decision making that enable single situated agents (such as robots or decision-support systems) and teams of agents to act intelligently in their environments. Prof. Koenig has published more than 200 papers in various areas of artificial intelligence and robotics. He is a fellow of the Association for the Advancement of Artificial Intelligence (AAAI), has won a number of awards for his research, teaching and mentoring, was conference co-chair of the 2004 International Conference on Autonomous Agents and Multi-Agent Systems and the 2015 AAAI Conference. He is the current chair of the ACM Special Interest Group on Artificial Intelligence, an associate editor of the Artificial Intelligence journal, the Journal of Autonomous Agents and Multi-Agent Systems, and the Journal on Advances in Complex Systems, and an editor of the Communications of the ACM and AI Magazine.

