Morning Keynote

Title: *Actor-Agent Communities: supporting inter-organisational cooperation*

Speaker: Niek Wijngaards

Abstract

Actor-Agent Communities are social-technical systems including human and artificial entities. AACs have the capability of contributing to solving non-standard, real-life complex problems (such as decision making under critical circumstances, dynamic situational contexts, and distributed decision points), where satisfactory solutions can only be obtained through a genuine fusion between the creative thinking of humans and the processing speed, accuracy and endurance of computers. One of the interesting phenomena is that AACs can span across organisational boundaries, enabling cooperation and sharing of information while also retaining organisational autonomy and policy-making.

The keynote addresses actor-agent communities and in particular their application to foster secure, distributed multi-organisational information sharing, cooperation and context-specific information dissemination. The ideas and concepts are briefly illustrated by means of the recently started MIA-Veiligheid project "SlimVerbinden".

About the Speaker

Dr. Niek Wijngaards is senior researcher and program manager at Thales Nederland B.V. He studied Computer Science at the Vrije Universiteit Amsterdam where he specialised in artificial intelligence. He received his PhD in 1999 on the topic of self-modifying agent systems using a re-design process. In 1998 he worked for a year at the University of Canada as a Postdoctoral-Fellow, after which he became an assistant professor at the Artificial Intelligence group at the VUA. From 2000 to 2004 he was an assistant professor at the Intelligent Interactive Distributed Systems group at the VUA headed by prof.dr. Frances Brazier. During these years his research involved design processes to support large-scale heterogeneous adaptive multi-agent systems and analysis of legal implications of agent technology. Since October 2004 he works for Thales Research & Technology Netherlands, part of Thales Nederland BV, and is fully employed at D-CIS Lab, see http://www.d-cis.nl . Niek has a joint role as senior researcher and program manager, being involved in research on actor-agent teams as well as their practical applications at e.g. the Dutch Police organisation and the Dutch National Railroad. Niek participates in both international (FP7) projects such as DIADEM and BRIDGE, as well as national projects, including MIA-Veiligheid Slim Verbinden. Since 2011 he holds the position of Visiting Senior Research Fellow at the Leeds University Business School. His current research addresses cross-organisational cooperation using actor-agent communities and scenario-based multi-criteria decision analysis, see http://publications.decis.nl .