

News

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Call for Participation

KI 2012 35th German Annual Conference on Artificial Intelligence

September, 24–27 Saarbrücken, Germany

KI 2012 is the 35th edition of the German Conference on Artificial Intelligence, which traditionally brings together academic and industrial researchers from all areas of AI. The technical programme of KI 2012 will comprise paper and poster presentations and a variety of workshops and tutorials. KI 2012 will take place in Saarbrücken, Germany, September 24–27, 2012, and is a premier forum for exchanging news and research results on theory and applications of all aspects on AI. The conference invited significant, original, and previously unpublished research from all areas of AI, its fundamentals, its algorithms, its history, and its applications.

Areas of interest included, but were not limited to:

- Knowledge Acquisition, Representation, Reasoning and Ontologies
- Combinatorial Search, Configuration, Design and Deduction
- Natural Language Processing, Statistical NLP, Semantics
- Planning and Scheduling; Spatial and Temporal Reasoning
- Reasoning under Uncertainty, Probabilistic Inferences
- Non-Monotonic Reasoning and Default Logics
- Constraint Satisfaction, Processing and Programming

- Embodied AI: Robotics, Vision and Perception
- Intelligent Information Retrieval, Semantic Search, Semantic Web
- Evolutionary and Neural Computation
- Machine Learning, Computational Learning Theory and Data-Mining
- Distributed Problem Solving and Multi-Agent Systems
- Game Playing and Interactive Entertainment, AI for Graphics
- Game Theory and General Game Playing, Generalized Intelligence
- AI for Human-Computer-Interaction and Adaptive Communication
- Mobile Solutions with Textile, Semantic and Spatial Media
- Augmented Reality, Smart Cities, Smart Traffic, Smart Hardware
- Assistance Systems in Living and Working Environments
- Software-Engineering, Model Checking and Security in AI
- Distributed Computation and Swarm Intelligence
- Cognitive Modelling, AI and Psychology
- History and Philosophical Foundations of AI
- Applications including Logistics, Production and Health Care

We especially welcome application papers and posters providing novel insights on the interplay of AI and the real world, as well as papers that bring useful computational technologies from other areas of computer science into AI.

Important Dates

Early Bird Registration:

Before or on September 10, 2012

Notification (poster, doctoral consortium, and workshop papers): August 31, 2012

Conference: September 24–27, 2012

Venue

The state capital of Saarbrücken is the regional centre of the Saarland and is situated at the heart of the Saar-Lor-Lux region. The city has approximately 180.000 inhabitants and is strongly influenced by its proximity to France and the chequered history of a French–German border town. The university, trade fair and conference city is set amidst vast woods and enchants visitors with its French charm, which is reflected in the narrow alleys at the foot of the castle and in the pedestrian precinct at the St. Johanner Market Square. Saarbrücken is currently evolving from a stagnant mining town to a vibrant centre of service, science, research and modern technology.

Saarland University is a modern university within the Saar-Lor-Lux region. An international perspective has been a defining feature of Saarland University ever since it was established in cooperation with France in 1948. Today, 17.000 young people are studying in Saarbrücken and Homburg (Faculty of Medicine), 15 per cent of whom are international students. Located in a pleasant woodland setting, the university campus offers students and researchers a broad range of sporting and cultural activities, which together with the numerous cafés and restaurants make the campus an ideal place to relax between lectures or after work. And thanks to the high-speed ICE train link it takes only two hours to travel from Paris to Saarbrücken.

Saarbrücken Computer Science welcomes you!

Saarbrücken is an international research-oriented center for computer science. Researchers at Saarland University cooperate closely with the Max Planck Institute for Informatics, the Max Planck Institute for Software Systems, the German Research Center for Artificial Intelligence (DFKI), the Center for Bioinformatics and the Visual Computing Institute. These internationally renowned research institutes are co-located on the Saarbrücken University Campus, neighbours to the Computer Science Department with its 19 chairs and the Computational Linguistics department with its 9 chairs. All in all, more than 500 researchers in Computer Science have made their academic home in Saarbrücken. Many work on common projects funded by the German Government, the European Union or industrial partners. In October

2007, Saarbrücken Computer Science was awarded two major grants in the framework of the Initiative for Excellence of the German federal and state governments: the Cluster of Excellence on Multimodal Computing and Interaction and funding for the Saarbrücken Graduate School of Computer Science, which will help us continue to build and secure our international scientific and academic standing.

Researchers of Computer Science Research in Saarbrücken have won six Leibniz Prizes, the highest German research award. Saarbrücken is furtheron the only Campus with three Karl Heinz Beckurts awards, four Konrad Zuse awards and the only German Future Prize awarded to a researcher in Computer Science.

The German Research Center for Artificial Intelligence, with sites in Kaiserslautern, Saarbrücken, Bremen (with an associated branch in Osnabrück) and a project office in Berlin, is the leading German research institute in the field of innovative software technology. In the international scientific community, DFKI ranks among the most recognized “Centers of Excellence” and currently is the biggest research center worldwide in the area of Artificial Intelligence and its application in terms of number of employees and the volume of external funds.

Doctoral Consortium

To support young academics, the KI conference organizes a Doctoral Consortium (DC) that addresses PhD students at any stage and from any subject area within AI, complementing the program of talks, workshops and tutorials. The aim of the DC is to provide PhD students with the opportunity to present their ongoing research and receive feedback from established researchers, to promote networking among PhD students and AI researchers both on a national and an international level, and to support students with information and advice on academic, research, and industrial careers. The DC is implemented as a student mentoring program where each participating PhD student is assigned a senior researcher from the relevant subfield of AI as a mentor. Students accepted for the Doctoral Consortium will participate also in the main KI 2012 conference and are waived registration fee.

Invited Speakers

Ian Horrocks from the University of Oxford, UK

Semantics \sqcap *Scalability* $\models \perp$

So called “Semantic Technologies” are rapidly becoming mainstream technologies, with RDF and OWL now being deployed in diverse application domains, and with major

technology vendors starting to augment their existing systems accordingly. For example, Oracle Inc. recently enhanced its well-known database management system with modules that use RDF/OWL ontologies to support “semantic data management”, and their product brochure lists numerous application areas that can benefit from this technology, including Enterprise Information Integration, Knowledge Mining, Finance, Compliance Management and Life Science Research. This is, however, only the first step for Semantic Web research; we need to demonstrate that the Semantic Technologies we are developing can (be made to) exhibit robust scalability if deployments in large scale applications are to be successful. In this talk I will review the evolution of Semantic Technologies to date, and show how research ideas from logic based knowledge representation developed into a mainstream technology. I will then go on to examine the scalability challenges arising from deployment in large scale applications, and discuss ongoing research aimed at addressing them.

Tanja Schultz from the Karlsruhe Institute of Technology

Biosignals and Interfaces

Human communication relies on signals like speech, mimics, or gestures and the interpretation of these signals seems to be innate to humans. In contrast, human interaction with machines and thus human communication mediated /through/ machines is far from being natural. To date, it is restricted to few channels and the capabilities of machines to interpret human signals are still very limited.

At the Cognitive Systems Lab (CSL) we explore human-centered cognitive systems to improve human-machine interaction as well as machine-mediated human communication. We aim to make better use of the strength of machines by departing from just mimicking the human way of communication. Rather we focus on considering the full range of biosignals emitted from the human body, such as electrical biosignals like brain and muscle activity. These signals can be directly measured and interpreted by machines, leveraging emerging wearable, small and wireless sensor technologies. Using these biosignals offers an /inside perspective/ on human mental activities, intentions, or needs and thus complements the traditional way of observing humans from the outside.

In my talk I will discuss ongoing research on “*Biosignals and Interfaces*” at CSL, such as silent speech interfaces that rely on articulatory muscle movement, and interfaces that use brain activity to determine users’ mental states, such as task activity, cognitive workload, emotion, and personality. We hope that our research will lead to a new generation of human centered “anthropomatic” systems, which are completely aware of the users’ needs and provide intuitive, effi-

cient, robust, and adaptive input mechanisms to interaction and communication.

Elisabeth André from the University of Augsburg

Exploring the potential of social signal processing for human-machine interaction: Synergies and challenges

Societal challenges, such as assisted living for elderly people, create a high demand for technology able to emulate human-style interaction modes. Currently, most man-machine interfaces focus on input that is explicitly issued by the human users. However, often it is the myriad of unconsciously conveyed signals that will determine whether an interaction with a machine is successful or not. In my talk I will show how recent advances in the area of social signal processing can contribute to new forms of individual and collective experiences when interacting with technology. I will present a framework for social signal interpretation (SSI) that synchronizes and analyzes human behavior in real-time, such as body gestures, facial expressions, head nods, and emotional speech. In addition, I will demonstrate the potential of social signal interpretation technology as a tool to evaluate the experiences of humans interacting with a machine. The talk will be illustrated by examples from single and multi-user interactions with virtual characters and social robots.

List of Accepted Papers

The review process was very selective. Out of 58 contributions submitted this year, the Program Committee accepted 31 (21 unconditionally, 2 of them conditionally and 8 as short papers) leading to an acceptance ratio of 53 %.

Long papers:

- *Matthias Westphal and Julien Hué*
Nogoods in Qualitative Constraint-based Reasoning
- *Christopher Armbrust, Lisa Kiebusch, Thorsten Ropertz and Karsten Berns*
Verification of Behaviour Networks Using Finite-State Automata
- *Bernhard Beckert and Daniel Bruns*
Formal Semantics of Model Fields in Annotation-based Specifications
- *Christian Vollmer, Julian P. Eggert and Horst-Michael Gross*
Modeling Human Motion Trajectories by Sparse Activation of Motion Primitives Learned from Unpartitioned Data
- *Maheen Bakhtyar, Nam Dang, Katsumi Inoue and Lena Wiese*
CoopQA: Implementing Cooperative Query Answering for Conjunctive Queries by Iterative Generalization

- *Özgür Lütüf Özcep*
Knowledge-Base Revision Using Implications as Hypotheses
- *Benjamin Peherstorfer, Dirk Pflüger and Hans-Joachim Bungartz*
Clustering Based on Density Estimation with Sparse Grids
- *Ben Hennig and Norbert Reithinger*
Developing of an Multimodal Interactive Training System in Therapeutic Calisthenics for Elderly People
- *Christoph Schwering, Daniel Beck, Stefan Schiffer and Gerhard Lakemeyer*
Plan Recognition by Program Execution in Continuous Temporal Domains
- *Stefan Edelkamp, Tim Federholzner and Peter Kissmann*
Searching with Belief State Subsets in General Games with Incomplete Information
- *Christian Federmann*
A Machine-Learning Framework for Hybrid Machine Translation
- *Nikita Mattar and Ipke Wachsmuth*
Small Talk is more than Chit-Chat: Exploiting Structures of Casual Conversations for a Virtual Agent
- *Marvin Schiller and Fernand Gobet*
A Comparison between Cognitive and AI Models of Blackjack Strategy Learning
- *Xiaomin Zhang, Sandra Zilles and Robert C. Holte*
Improved Query Suggestion by Query Search
- *Shahin Jabbari, Robert C. Holte and Sandra Zilles*
PAC-Learning with General Class Noise Models
- *Kristina Yordanova, Frank Krüger and Thomas Kirste*
Strategies for Modelling Human Behaviour for Activity Recognition with Precondition-Effect Rules
- *Marc Finthammer and Christoph Beierle*
Using Equivalences of Worlds for Aggregation Semantics of Relational Conditionals
- *Norbert Manthey*
Peter Steinke and Steffen Hölldobler. A Compact Encoding of Pseudo-Boolean Constraints into SAT
- *David Zastraun and Stefan Edelkamp*
Stochastic Gradient Descent with GPGPU
- *Oliver Kramer*
Unsupervised Nearest Neighbors with Kernels
- *Jens Kessler, Jürgen Strobel and Horst-Michael Gross*
Avoid Moving Persons by Using Spatio Temporal Planning

Conditionally accepted long papers:

- *Alexander Felfernig, Florian Reinfrank and Gerald Ninas*
Redundancy Elimination for Constraint Sets

- *Stefanie Neubert and Marco Ragni*
A Computational Model and Complexity Measure for IQ-test Problems

Short papers

- *Sangkyun Lee*
Improving Confidence of Stochastic Online Learning via Aggregation
- *Kamel Nebhi*
Ontology-based Information Extraction for french newspaper articles
- *David Muench, Eckart Michaelsen and Michael Arens*
Supporting Fuzzy Metric Temporal Logic Based Situation Recognition by Mean Shift Clustering
- *Tatjana Scheffler, Rafael Schirru and Paul Lehmann*
Matching Points of Interest from Different Social Networking Sites
- *Michael Siebers and Ute Schmid*
Semi-Analytic Natural Number Series Induction
- *Maciej Ogrodniczuk and Magdalena Zawistawska*
Semantic Approach to Identity in Coreference Resolution Task
- *Alexander Volokh and Guenter Neumann*
Transition-based Dependency Parsing with Efficient Feature Extraction
- *Mohammad Reza Yousefi and Thomas M. Breuel*
Gated Boosting: Efficient Classifier Boosting and Combining

Tutorials

Region-based theories of space

Philippe Balbiani
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The tutorial is about region-based theories of space. It concerns several aspects of artificial intelligence and computer science like: qualitative reasoning, spatial information system, constraint satisfaction problems. It will cover (1) formal languages interpreted over classes of structures featuring regions and relations between them, (2) first-order mereotopologies, (3) Boolean contact algebras, (4) Tarski's interpretation of modal logic based on the interior and closure operators of topology and von Wright's interpretation of modal logic based on the "being included" and "being in contact" relations of mereotopology, and (5) introduction into a number of different constraint calculi covering topology, orientation, etc.

DesigningAmI—a hands-on tutorial on designing ambient intelligence environments

Sabine Janzen, Wolfgang Maass
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Tutorial web site
<http://iss.uni-saarland.de/en/projects/ki12-designing-ami/>

Designing complex Artificial Intelligence systems like ambient intelligence environments (AIE) is a task performed by design teams with team members coming from different domains with different expertise. Shared understanding between members of a design team throughout such a project is still a challenge. The KI'12 tutorial “*DesigningAmI*” illuminates the challenges of designing AIE embedded in a complex social network and gives a brief survey concerning existing design methods in Artificial Intelligence, Human-Computer-Interaction and Software Engineering regarding their applicability in the field of AIE. Regarding AIE as an innovative class of Artificial Intelligence systems, there exists no design method that addresses their specific characteristics in a holistic manner and guides design teams in developing AIE by “getting all on board”. In the tutorial, a generic design framework is presented that integrates individual implicit design knowledge, explicit design knowledge used by design teams, and computational design knowledge. Core elements of this design framework, i.e., modeling languages for expressing conceptual models, e.g., OWL and translations processes between these characteristic design knowledge explications will be applied and discussed by the participants when designing an exemplary AIE.

The cognitive architecture ACT-R

Marco Ragni, Rebecca Albrecht, and Stefano Bennati
 Center for Cognitive Science, University of Freiburg,
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Tutorial web site
<http://imospace.iig.uni-freiburg.de/TutorialCognitiveRobotics/>

The goal of Cognitive Science is to explain human behavior based on the assumption that human cognitive processes are computations, i.e., that they can be expressed as data structures and algorithms. The cognitive architecture ACT-R (Anderson, 2007) is a framework that integrates general psychological assumptions, developed by hundreds of psychologists. Empirical findings such as reaction times, error rates and even fMRI data are predicted and reproduced by so-called cognitive models within such an architecture.

The goal of this tutorial is to introduce the core aspects of ACT-R 6.0 with a special focus on learning mechanisms applied on cognitive robotics. In the first part basic concepts of ACT-R are briefly introduced. This includes three main concepts. The data structure, i.e., how the knowledge base of a cognitive model can be defined. The algorithmic structure, i.e., how behavior of a cognitive model can be defined based on the assumptions that human cognitive processing is organized in modules, and that behavior is defined as production rules. The sub-symbolic components, i.e., how symbolic computations are restricted in order to explain how errors are made, and new facts and behavior can be learned. In the second part of the tutorial the participants will have the possibility for hands-on experience on ACT-R with an application to cognitive robotics.

Object Memory Tools: Tailoring a Thing’s Data Collection and Communication Behavior

Jens Hauptert, Alexander Kröner, Boris Brandherm
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Tutorial web site
http://www.dfki.de/omm-tools/ki12_tutorial.php

The Internet of Things envisions new roles for physical objects in everyday life. This tutorial addresses one of these roles—the collecting of data, about the objects as well as object-related topics such as tasks, processes and even users that came in touch with the object. So-called Digital Object Memories address this idea with approaches dedicated to data models, architectures and interaction methodologies for object-centric data collection. Related research comprises application areas such as manufacturing control, monitoring integrity in logistics, product stories for retail, and even management of personal experiences. The tutorial focuses on how to enable a “smart” behavior of such data collections. It illustrates approaches to setting up an infrastructure needed to host object memories as well as ways to install and distribute methods for collecting, processing and communicating data. Consequently, the tutorial is meant for researchers and developers interested in using distributed Artificial Intelligence in the Internet of Things. The tutorial combines a theoretical introduction into the matter with a practical exercise based on a given toolset, the “object memory tools”. Participants will get introduced into setting up, structuring and applying an object memory in a practically-oriented application scenario.

Workshops

6th Workshop: “Emotion and Computing—current research and future impact”

The workshop series “Emotion and Computing—current research and future impact” has been providing a platform for discussion of emotion related topics of computer science and AI since 2006. In recent years computer science research has shown increasing efforts in the field of software agents which incorporate emotion. Several approaches have been made concerning emotion recognition, emotion modeling, generation of emotional user interfaces and dialogue systems as well as anthropomorphic communication agents. Motivations for emotional computing are manifold. From a scientific point of view, emotions play an essential role in decision making, as well as in perception and learning. Furthermore, emotions influence rational thinking and therefore should be part of rational agents as proposed by artificial intelligence research. Another focus is on human computer interfaces which include believable animations of interface agents. From a user perspective, emotional interfaces can significantly increase motivation and engagement which is of high relevance to the games and e-learning industry. Moreover, motivational and emotional aspects may play a key role in persuasive technologies, which intend to influence the user behaviour.

The goal of the workshop is to provide a forum for the presentation of research as well as of existing and future applications and for lively discussions among researchers and industry. The presented papers should discuss theories, architectures and applications which are based upon emotional aspects of computing mainly in the fields related to Artificial Intelligence, Cognitive Sciences and Multi-agent Systems. More detailed information can be found on the workshop website.

Main Contact:

Prof. Dr. Dirk Reichardt,
Baden-Württemberg Cooperative State University, Stuttgart

Workshop Website:

<http://www.emotion-and-computing.de>

AI on the Web

The World Wide Web has become a unique source of knowledge on virtually any imaginable topic. It is continuously fed by companies, academia, and common people with a variety of information in numerous formats. By today, the Web has become an invaluable asset for research, learning, commerce, socializing, communication, and entertainment. Still, making full use of the knowledge contained on the Web is

an ongoing challenge but also a promising chance for AI methods that can help to make the knowledge on the Web more accessible for humans and machines by capturing, representing and using information semantics. This workshop is meant as a forum for these issues and intends to nurture research and discussion in applying AI methods to problems on the Web. The workshop welcomes full technical contributions containing an application of AI methods to real data on the web. Furthermore, interesting problems and position statements on issues involving the application of AI methods on the web can be submitted in form of short papers.

Workshop co-chairs

Sebastian Rudolph,
Karlsruhe Institute of Technology, Germany
Heiner Stuckenschmidt,
University of Mannheim, Germany
Matthias Thimm, *University of Koblenz-Landau, Germany*

Workshop Webpage

<http://aiw2012.west.uni-koblenz.de>

27. Workshop on Planning and Scheduling, Configuration and Design (PuK 2012)

Again, the PuK workshop will bring together researchers and practitioners of the areas of planning, scheduling, design and configuration. It provides a forum for the exchange of ideas, evaluations and experiences especially in the use of AI techniques within these application and research areas.

This year’s workshop will focus on systems that use the intelligent tools and techniques developed in the area of planning, scheduling and configuration. With this the workshop is also attractive to practitioners in the field, who are invited to present practical problems and to discuss their experiences, concepts, and ideas. It is also intended to stimulate a mutual exchange with the researchers on our common field’s future directions. Thus, a second main goal of the workshop is the support of research planning.

Besides the focal topic the general topics of interest of the PuK community include but are not limited to:

- Practical applications of configuration, planning or scheduling systems
- Architectures for planning, scheduling or configuration systems
- Knowledge representation and problem solving techniques, e.g. domain-specific techniques; heuristic techniques; distributed problem solving; constraint-based techniques; iterative improvement; integrating reaction and user-interaction.
- Learning in the context of planning, scheduling and design.

Workshop co-chairs

Prof. Dr.-Ing. Jürgen Sauer,
juergen.sauer@uni-oldenburg.de
 Prof. Dr. Stefan Edelkamp,
edelkamp@tzi.de
 Dr. Bernd Schattenberg,
bernd.schattenberg@uni-ulm.de

Workshop Webpage:

<http://www.puk-workshop.de>

Human Reasoning and Automated Deduction

Automated deduction aims at formalizing diverse aspects of reasoning and has many application areas from software verification to mathematical theorem proving. It is originally based on algorithmic methods derived from mathematical logics. In contrast, human reasoning cannot be completely described by logical systems. Sources of explanations are incomplete knowledge, incorrect beliefs, or inconsistencies. Still, humans have an impressive ability to derive acceptable conclusions. From the very beginning of AI research, there has been a strong emphasis on incorporating mechanisms of human rationality and cognition into reasoning systems.

This workshop aims at bringing together researchers from AI, Automated Deduction, and Cognitive Science to foster a multi-disciplinary exchange and to discuss possibilities to overcome the historic separation. Topics of interest include, but are not limited to the following:

- Non-monotonic, defeasible, and classical reasoning and possible explanations for human reasoning
- Limits and differences between automated and human reasoning
- Application fields of automated reasoning in the interaction with human reasoners (e.g., in spatial knowledge processing)
- Human-computer interaction and cognitive robotics (regarding the relevance for reasoning methods)

It continues a series of successful workshops in the KIK-KI & Kognition Workshop Series initiated by the Special Interest Group “Cognition” in the GI.

Workshop co-chairs

Thomas Barkowsky (*U Bremen*),
 Marco Ragni (*U Freiburg*),
 Frieder Stolzenburg (*Harz U of Applied Sciences*).

Workshop Webpage

<http://imodspace.iig.uni-freiburg.de/kik>

First International Workshop “From Modeling to Assistance (M2A)”

The first international workshop from Modeling to Assistance (M2A) will be held as a one day event co-located with the 35th German Conference on Artificial Intelligence (KI) 2012. The goal of the M2A workshop is to provide a forum for researchers from both areas—model-based intention recognition and strategy synthesis for smart environments—where current methods for recognizing the user intentions and for providing assistance in smart environments will be discussed. As an outcome of the discussion we intend to assemble a list of successful as well as unsuccessful approaches for the above mentioned challenges. Such collection will provide a guideline for best practices and a possible roadmap to success in this research field.

The workshop solicits papers on the topics of reasoning under uncertainty, probabilistic modeling and inference, causal reasoning, model-based reasoning and diagnosis, graphical models, situation awareness, model-based activity recognition, model-based intention analysis, strategy synthesis, and proactive assistance in smart environments.

The workshop is organized by members of the Mobile Multimedia Information Systems Group from The University of Rostock and the research training group MuSAMA, which among other topics, deal with different aspects from the field of activity recognition and proactive assistance.

Workshop co-chairs:

Kristina Yordanova, Sebastian Bader and Frank Krüger
 Institut für Informatik, Lehrstuhl MMIS
 Universität Rostock

Workshop Webpage:

<http://mmis.informatik.uni-rostock.de/m2a/>

Dialog Systems that think along—do they really understand me?

A dialogue is a written, spoken or otherwise expressed conversational exchange between two or more people or technical systems. While early dialogue systems, e.g. for automatic telephone answering machines, had some shortcomings, i.e. restricted vocabulary and grammar and lack of prosodic elements, recent approaches focus on natural and multi-modal human-machine interaction techniques to archive high user acceptance. This, e.g., enables trans-modal conversation, where the semantic meaning is represented by two different modalities, i.e. complementing speech and gesture: saying “give me that” while pointing to a particular object. Furthermore, a common representation format for multimodal human communication is focus of ongoing research activities.

To enable a mostly natural and intuitive human-machine-interaction, several complex communication and interaction principles between people and computers have to be realized, covering the realization and evaluation of interactive

machine and computing systems. This covers knowledge representation, cognitive systems, displaying techniques and other ergonomic interfaces, signal processing, pattern recognition, human factors, haptics and (social) robotics, just to name a few.

Workshop co-chairs:

Frank Wallhoff, Bernd Schönebeck and Stefan Goetze
Branch Lab Oldenburg, Haus des Hörens

Workshop Webpage:

http://www.idmt.fraunhofer.de/en/events_and_exhibitions/dialogueki12ws.html

Conference Organization

General Chair

Antonio Krüger (*Saarland University and DFKI*)

Program Chair

Birte Glimm (*University of Ulm*)

Local Chairs

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