

# Artificial General Intelligence

**Second Conference  
on Artificial General Intelligence**  
AGI 2009  
Arlington, Virginia, USA  
March 6-9, 2009

**Editors**  
Ben Goertzel, Pascal Hitzler,  
Marcus Hutter

Ben Goertzel, Pascal Hitzler, Marcus Hutter (Editors)

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# Artificial General Intelligence

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During the past decade computer science research in understanding and reproducing human intelligence has expanded from the more traditional approaches like psychology, logics and artificial intelligence into multiple other areas, including neuroscience research. Moreover, new results in biology, chemistry, (surface) physics and gene technology, but also in network technology are greatly affecting current research in computer science, including the development of intelligent systems. At the same time, computer science's new results are increasingly being applied in these fields allowing for important cross-fertilisations. This series aims at publishing proceedings from all disciplines dealing with and affecting the issue of understanding and reproducing intelligence in artificial systems. Also, the series is open for publications concerning the application of intelligence in networked or any other environment and the extraction of meaningful data from large data sets.

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## Preface

Artificial General Intelligence (AGI) research focuses on the original and ultimate goal of AI – to create broad human-like and transhuman intelligence, by exploring all available paths, including theoretical and experimental computer science, cognitive science, neuroscience, and innovative interdisciplinary methodologies. Due to the difficulty of this task, for the last few decades the majority of AI researchers have focused on what has been called *narrow AI* – the production of AI systems displaying intelligence regarding specific, highly constrained tasks. In recent years, however, more and more researchers have recognized the necessity – and feasibility – of returning to the original goals of the field. Increasingly, there is a call for a transition back to confronting the more difficult issues of *human level intelligence* and more broadly *artificial general intelligence*.

The Conference on Artificial General Intelligence is the only major conference series devoted wholly and specifically to the creation of AI systems possessing general intelligence at the human level and ultimately beyond. Its second installation, AGI-09, in Arlington, Virginia, March 6-9, 2009, attracted 67 paper submissions, which is a substantial increase from the previous year. Of these submissions, 33 (i.e., 49%) were accepted as full papers for presentation at the conference. Additional 13 papers were included as position papers. The program also included a keynote address by Jürgen Schmidhuber on *The New AI*, a post-conference workshop on *The Future of AI*, and a number of pre-conference tutorials on various topics related to AGI.

Producing such a highly profiled program would not have been possible without the support of the community. We thank the organising committee members for their advise and their help in all matters of actually preparing and running the event. We thank the program committee members for a very smooth review process and for the high quality of the reviews – despite the fact that due to the very high number of submissions the review load per PC member was considerably higher than originally expected. And we thank all participants for submitting and presenting interesting and stimulating work, which is the key ingredient needed for a successful conference. We also gratefully acknowledge the support of a number of sponsors:

- Artificial General Intelligence Research Institute
- Association for the Advancement of Artificial Intelligence (AAAI)
- The University of Memphis
- Enhanced Education (Platinum Sponsor and Keynote Address)
- KurzweilAI.net (Gold Sponsor and Kurzweil Best AGI Paper 2009)
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# Table of Contents

## Full Articles.

Project to Build Programs that Understand . . . . .	1
<i>Eric Baum</i>	
CHS-Soar: Introducing Constrained Heuristic Search to the Soar Cognitive Architecture . . . . .	7
<i>Sean Bittle, Mark Fox</i>	
In Search of Computational Correlates of Artificial Qualia . . . . .	13
<i>Antonio Chella, Salvatore Gaglio</i>	
Combining Analytical and Evolutionary Inductive Programming . . . . .	19
<i>Neil Crossley, Emanuel Kitzelmann, Martin Hofmann, Ute Schmid</i>	
The China-Brain Project: Report on the First Six Months . . . . .	25
<i>Hugo de Garis</i>	
AGI Preschool: A Framework for Evaluating Early-Stage Human-like AGIs	31
<i>Ben Goertzel, Stephan Bugaj</i>	
Pointer Semantics with Forward Propagation . . . . .	37
<i>Sujata Ghosh, Benedikt Löwe, Sanchit Saraf</i>	
The Role of Logic in AGI Systems: Towards a Lingua Franca for General Intelligence . . . . .	43
<i>Helmar Gust, Ulf Krumnack, Angela Schwering, Kai-Uwe Kuehnberger</i>	
The robotics path to AGI using Servo Stacks . . . . .	49
<i>John Hall</i>	
A Unifying Framework for Analysis and Evaluation of Inductive Programming Systems . . . . .	55
<i>Martin Hofmann, Emanuel Kitzelmann, Ute Schmid</i>	
Feature Markov Decision Processes . . . . .	61
<i>Marcus Hutter</i>	
Feature Dynamic Bayesian Networks . . . . .	67
<i>Marcus Hutter</i>	
Economic Attention Networks: Associative Memory and Resource Allocation for General Intelligence . . . . .	73
<i>Matthew Ikle, Joel Pitt, Ben Goertzel, George Sellman</i>	

A formal framework for the symbol grounding problem . . . . .	79
<i>Benjamin Johnston, Mary-Anne Williams</i>	
A Cognitive Map for an Artificial Agent . . . . .	85
<i>Unmesh Kurup, B. Chandrasekaran</i>	
Claims and Challenges in Evaluating Human-Level Intelligent Systems . . .	91
<i>John Laird, Robert Wray, Robert Marinier, Pat Langley</i>	
Extending Cognitive Architectures with Mental Imagery . . . . .	97
<i>Scott Lathrop, John Laird</i>	
A Comparative Approach to Understanding General Intelligence: Predicting Cognitive Performance in an Open-ended Dynamic Task . . . . .	103
<i>Christian Lebiere, Cleotilde Gonzalez, Walter Warwick</i>	
Incorporating Planning and Reasoning into a Self-Motivated, Communicative Agent . . . . .	108
<i>Daphne Liu, Lenhart Schubert</i>	
Program Representation for General Intelligence . . . . .	114
<i>Moshe Looks, Ben Goertzel</i>	
Consciousness in Human and Machine: A Theory and Some Falsifiable Predictions . . . . .	120
<i>Richard Loosemore</i>	
Hebbian Constraint on the Resolution of the Homunculus Fallacy Leads to a Network that Searches for Hidden Cause-Effect Relationships . . . . .	126
<i>Andras Lorincz</i>	
Everyone's a Critic: Memory Models and Uses for an Artificial Turing Judge . . . . .	132
<i>Joseph MacInnes, Blair Armstrong, Dwayne Pare, George Cree, Steve Joordens</i>	
Unsupervised Segmentation of Audio Speech Using the Voting Experts Algorithm . . . . .	138
<i>Matthew Miller, Peter Wong, Alexander Stoytchev</i>	
Parsing PCFG within a General Probabilistic Inference Framework . . . . .	144
<i>Arthi Murugesan, Nicholas Cassimatis</i>	
Self-Programming: Operationalizing Autonomy . . . . .	150
<i>Eric Nivel, Kristinn R. Thorisson</i>	
Bootstrap Dialog: A Conversational English Text Parsing and Generation System . . . . .	156
<i>Stephen Reed</i>	

Analytical Inductive Programming as a Cognitive Rule Acquisition Devise	162
<i>Ute Schmid, Martin Hofmann, Emanuel Kitzelmann</i>	
Human and Machine Understanding of Natural Language Character Strings	168
<i>Peter G. Tripodes</i>	
Embodiment: Does a laptop have a body?	174
<i>Pei Wang</i>	
Case-by-Case Problem Solving	180
<i>Pei Wang</i>	
What Is Artificial General Intelligence? Clarifying The Goal For Engineering And Evaluation	186
<i>Mark Waser</i>	
Integrating Action and Reasoning through Simulation	192
<i>Samuel Wintermute</i>	

### **Position Statements.**

Neuroscience and AI Share the Same Elegant Mathematical Trap	198
<i>Tsvi Achler, Eyal Amir</i>	
Relevance Based Planning: Why its a Core Process for AGI	200
<i>Eric Baum</i>	
General Intelligence and Hypercomputation	202
<i>Selmer Bringsjord</i>	
Stimulus processing in autonomously active cognitive systems	204
<i>Claudius Gros</i>	
Distribution of Environments in Formal Measures of Intelligence	206
<i>Bill Hibbard</i>	
The Importance of Being Neural-Symbolic – A Wilde Position	208
<i>Pascal Hitzler, Kai-Uwe Kühnberger</i>	
Improving the Believability of Non-Player Characters in Simulations	210
<i>Jere Miles, Rahman Tashakkori</i>	
Understanding the Brain’s Emergent Properties	212
<i>Don Miner, Marc Pickett, Marie desJardins</i>	
Why BICA is Necessary for AGI	214
<i>Alexei Samsonovich</i>	

Importing Space-time Concepts Into AGI .....	216
<i>Eugene Surowitz</i>	
HELEN – Using Brain Regions and Mechanisms for Story Understanding And Modeling Language As Human Behavior .....	218
<i>Robert Swaine</i>	
Holistic Intelligence: Transversal Skills & Current Methodologies .....	220
<i>Kristinn R. Thorisson, Eric Nivel</i>	
Achieving Artificial General Intelligence Through Peewee Granularity ...	222
<i>Kristinn R. Thorisson, Eric Nivel</i>	
<b>Author Index</b> .....	<b>224</b>

## Author Index

Achler, Tsvi .....	198	Lathrop, Scott .....	97
Amir, Eyal .....	198	Lebiere, Christian .....	103
Armstrong, Blair .....	132	Liu, Daphne .....	108
Baum, Eric .....	1, 200	Looks, Moshe .....	114
Bittle, Sean .....	7	Loosemore, Richard .....	120
Bringsjord, Selmer .....	202	Lorincz, Andras .....	126
Bugaj, Stephan .....	31	MacInnes, Joseph .....	132
Cassimatis, Nicholas .....	144	Marinier, Robert .....	91
Chandrasekaran, B. ....	85	Miles, Jere .....	210
Chella, Antonio .....	13	Miller, Matthew .....	138
Cree, George .....	132	Miner, Don .....	212
Crossley, Neil .....	19	Murugesan, Arthi .....	144
de Garis, Hugo .....	25	Nivel, Eric .....	140, 211, 213
desJardins, Marie .....	212	Pare, Dwayne .....	132
Fox, Mark .....	7	Pickett, Marc .....	212
Gaglio, Salvatore .....	13	Pitt, Joel .....	73
Ghosh, Sujata .....	37	Reed, Stephen .....	156
Goertzel, Ben .....	31, 73, 114	Samsonovich, Alexei .....	214
Gonzalez, Cleotilde .....	103	Saraf, Sanchit .....	37
Gros, Claudius .....	204	Schmid, Ute .....	19, 55, 162
Gust, Helmar .....	43	Schubert, Lenhart .....	108
Hall, John .....	49	Schwering, Angela .....	43
Hibbard, Bill .....	206	Sellman, George .....	73
Hitzler, Pascal .....	208	Stoytchev, Alexander .....	138
Hofmann, Martin .....	19, 55, 162	Surowitz, Eugene .....	216
Hutter, Marcus .....	61, 67	Swaine, Robert .....	218
Ikle, Matthew .....	73	Tashakkori, Rahman .....	210
Johnston, Benjamin .....	79	Thorisson, Kristinn R. ..	150, 220, 222
Joordens, Steve .....	132	Tripodes, Peter G. ....	168
Kitzelmann, Emanuel .....	19, 55, 162	Wang, Pei .....	174, 180
Krumnack, Ulf .....	43	Warwick, Walter .....	103
Kühnberger, Kai-Uwe .....	43, 208	Waser, Mark .....	186
Kurup, Unmesh .....	85	Williams, Mary-Anne .....	79
Löwe, Benedikt .....	37	Wintermute, Samuel .....	192
Laird, John .....	91, 97	Wong, Peter .....	138
Langley, Pat .....	91	Wray, Robert .....	91