# BNAIC 2004 - Program
## Paper, poster and demo presentation sessions

### Thursday, 21 October

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| 09:00 - 09:50 | **Registration** |
| 09:50 - 10:00 | **Opening** *(Auditorium)* |
| 10:00 - 11:00 | **Invited lecture: Prof. dr. Kerstin Dautenhahn, The Human in the Loop: Case Studies in Human-Robot Interaction Research** *(Auditorium)* |
| 11:00 - 11:20 | **Break** |

| 11:20 - 12:35 | **Paper presentations: Session 1** | | |
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| | Session 1A: *Auditorium* **Agents I** | Session 1B: *Conference Room 1* **Machine learning I** | Session 1C: *Conference Room 2* **Ontology & Semantic web** |
| | B. Reggers, F. Wiesman and Nico Roos: *Agents for Market-Based Computational-Resource Allocation* | I. Hendrickx and A. van den Bosch: *Maximum-Entropy Parameter Estimation for the k-NN Modified Value-Difference Kernel* | P. Bouquet, F. Giunchiglia, F. van Harmelen, L. Serafini and H. Stuckenschmidt: *C-OWL: Contextualizing Ontologies* |
| | J. Valk and P. van Tooren: *Multi-Agent Coordination in Dynamic Task Environments* | M. van Gerven and P. Lucas: *Using Background Knowledge to Construct Bayesian Classifiers for Data-Poor Domains* | P. Mika, D. Oberle, A. Gangemi and M. Sabou: *Foundations for Service Ontologies: Aligning OWL-S to DOLCE* |
| | P.J. 't Hoen and S.M. Bohte: *Collective INtelligence with Sequences of Actions* | M. Van Otterlo, K. Kersting and L. De Raedt: *Bellman goes Relational* | B. Wielinga, J. Wielemaker, G. Schreiber and M. van Assem: *Methods for Porting Resources to the Semantic Web* |

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| 12:35 - 13:35 | **Lunch** |

| 13:35 - 14:50 | **Paper presentations: Session 2** | | |
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| | Session 2A: *Auditorium* **Machine learning II** | Session 2B: *Conference Room 1* **Logic in AI** | Session 2C: *Conference Room 2* **Communication & Negotiation** |
| | E.L. van den Broek and E.M. van Rikxoort: *Evaluation of Color Representation for Texture Analysis* | H.W. de Haan, W.H. Hesselink and G.R. Renardel de Lavalette: *Knowledge-Based Asynchronous Programming* | D. Weyns, E. Steegmans and T. Holvoet: *Protocol-based Communication for Situated Agents* |
| | E.N. Smirnov, I.G. Sprinkhuizen-Kuyper and G.I. Nalbantov: *Unanimous Voting using Support Vector Machines* | B. Verheij: *Dialectical argumentation with argumentation schemes: an approach to legal logic* | C. Jonker and V. Robu: *Automated Multi-Attribute Negotiation Using Incomplete Preference Information* |
| | S.M. Bohte, M. Breitenbach and G.Z. Grudic: *Nonparametric Classification with Polynomial MPMC Cascades* | M. Denecker and E. Ternovska: *Inductive Situation Calculus* | K. Somefun, T. Klos and H. La Poutré: *Negotiating over Bundles and Prices Using Aggregate Knowledge* |

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| 14:50 - 15:10 | **Break** |

| 15:10 - 16:50 | **Paper, poster and demo presentations: Session 3** | | |
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| | Session 3 : *Auditorium* **Short presentations of demonstrations** | Session 3B: *Conference Room 1* **Posters** | Session 3C: *Conference Room 2* **Planning (15:35 - 16:50)** |
| | For a complete overview of all demonstration presentations look at the end of the program | For a complete overview of all poster presentations look at the end of the program | J. Zutt and C. Witteveen: *Multi-Agent Transport Planning* |
| | | | R. van der Krogt and M. de Weerdt: *The Two Faces of Plan Repair* |
| | | | P. Buzing and C. Witteveen: *Distributed (Re)Planning With Preference Information* |

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| 16:50 | **Move to reception** |
| 19:00 | **Dinner** |

## Friday, 22 October

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| 09:00 - 10:00 | **Invited lecture: Prof. dr. Patrick Doherty, Advanced Research with Autonomous Unmanned Aerial Vehicles** (*Auditorium*) |

| 10:00 - 11:15 | **Paper presentations: Session 4** | | |
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| | Session 4A: *Auditorium* <br> **Agents II** | Session 4B: *Conference Room 1* <br> **Machine learning III** | Session 4C: *Conference Room 2* <br> **Cognitive modeling** |
| | M. Dastani, J. Hulstijn, F. Dignum and J-J. Ch. Meyer: *Issues in Multiagent System Development* | J.J. Verbeek, N. Vlassis and B.J.A. Kröse: *Self-organising mixture models* | J. Lacroix, J. Murre, E. Postma and J. van den Herik: *The natural input memory model* |
| | R-J. Beun and R.M. van Eijk: *Ontological Feedback in Multiagent Systems* | J.R. Kok and N. Vlassis: *Sparse Cooperative Q-learning* | L.J.M. Rothkrantz, P. Wiggers, J.W.A. van Wees and R.J. van Vark: *Voice Stress Analysis* |
| | T.Bosse, C.M. Jonker and J. Treur: *Analysis of Design Process Dynamics* | I. Berezhnoy, E. Postma and J. van den Herik: *Digital analysis of Van Gogh's complementary colours* | N. Niekboer, E. Postma and J. van den Herik: *A context-based model of attention* |

| 11:15 - 11:35 | **Break** |
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| 11:35 - 12:25 | **Paper presentations: Session 5** | | |
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| | Session 5A: *Auditorium* <br> **Information Retrieval** | Session 5B: *Conference Room 1* <br> **Pattern Recognition** | Session 5C: *Conference Room 2* <br> **Robotics** |
| | S. Schlobach, M. Olsthoorn and M. de Rijke: *Type Checking in Open-Domain Question Answering* | M. Bulacu and L. Schomaker: *Analysis of texture and connected-component contours for the automatic identification of writers* | M. van Dartel, E. Postma and J. van den Herik: *Categorisation through Internal Simulation of Perception and Behaviour* |
| | J. Kamps, M. de Rijke and B. Sigurbjörnsson: *Length Normalization in XML Retrieval* | D.M.J. Tax: *Regularizing the Covariance Matrix Using Spatial Information* | W. Zajdel, A. Taylan Cemgil and B.J.A. Kröse: *Online Multicamera Tracking with a Switching State-Space Model* |

| 12:25 - 14:05 | **Lunch and BNVKI general assembly** |
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| 14:05 - 15:20 | **Paper presentations: Session 6** | | |
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| | Session 6 : *Auditorium* <br> **Agents III** | Session 6B: *Conference Room 1* <br> **Machine Learning IV** | Session 6C: *Conference Room 2* <br> **AI in Law and Medicine** |
| | J-J. Ch. Meyer: *Reasoning about Emotional Agents* | S. Raeymaekers and M. Bruynooghe: *Parameterless Information Extraction Using (k,l)-Contextual Tree Languages* | L. Xu and M.A. Jeusfeld: *Proactive Monitoring of Electronic Contracts* |
| | J. Broekens and D. DeGroot: *Emotional Agents need Formal Models of Emotion* | A. van den Bosch: *Wrapped Progressive Sampling Search for Optimizing Learning Algorithm Parameters* | P.L. Geenen, L.C. van der Gaag, A.R.W. Elbers and W.L.A. Loeffen: *Building Naive Bayesian Classifiers from Literature: a Case Study in Classical Swine Fever* |
| | N. Roos and C. Witteveen: *Plan Diagnosis with Agents* | E.D. de Jong and D. Thierens: *Exploiting Modularity, Hierarchy, and Repetition in Variable-Length Problems* | A. Hommersom, P. Lucas and M. Balser: *Logic and the Quality of Medical Guidelines* |

| 15:20 - 15:40 | **Break** |
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| 15:40 - 16:55 | **Paper presentations: Session 7** | | |
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| | Session 7A: *Auditorium* <br> **Games** | Session 7B: *Conference Room 1* <br> **Knowledge Technology and Uncertainty** | |
| | K.J. Batenburg and W.A. Kosters: *A Discrete Tomography Approach to Japanese Puzzles* | J.H. Bolt and L.C. van der Gaag: *On the Convergence Error in Loopy Propagation* | |
| | H-J. Lebbink, C. Witteman and J-J. Meyer: *A Dialogue Game Approach to Multi-Agent System Programming* | P. Groot, A. ten Teije and F. van Harmelen: *Towards a Structured Analysis of Approximate Problem Solving: a Case Study in Classification* | |
| | H.W. de Haan, W.H. Hesselink and G.R. Renardel de Lavalette: *An abstract multi-agent framework applied to a social interaction game* | S. Renooij: *Forecast Verification and the Uncertain Truth* | |

| 16:55 - 17:10 | **Award ceremony and closing** (*Auditorium*) <br> - Elsevier Best Paper Award for the best original paper <br> - SKBS Prize for the best demo/application |
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# Overview of Poster presentations:

- F. Roelofsen and L. Serafini: *Complexity of Contextual Reasoning*
- M. Hoogendoorn, C.M. Jonker, M. Schut and J. Treur: *Modelling the Organisation of Organisational Change*
- T. Bosse, C.M. Jonker and J. Treur: *Experiments in Human Multi-Issue Negotiation: Analysis and Support*
- R. Knauf, A. Spreeuwenberg, R. Gerrits and M. Jendreck: *A Step out of the Ivory Tower: Experiences with Adapting a Test Case Generation Idea to Business Rules*
- C.M. Jonker, J. Treur and P. Yolum: *A Formal Reuse-Based Approach for Interactively Designing Organizations*
- C.M. Jonker, M. Schut, J. Treur and P. Yolum: *Formal Analysis of Meeting Protocols*
- W. Teepe: *New Protocols for Proving Knowledge of Arbitrary Secrets While not Giving Them Away*
- A. Sharpanskykh: *The problems of automated distance learning systems community formation*
- A. Ypma and T. Heskes: *Novel approximations for inference and learning in nonlinear dynamical systems*
- T. Bosse, C.M. Jonker, M. Schut and J. Treur: *Simulation and Analysis of Shared Extended Mind*
- T. Heskes, O. Zoeter and W. Wiegerinck: *Approximate Expectation Maximization*
- O. Zoeter, A. Ypma and T. Heskes: *Improved Unscented Kalman smoothing for stock volatility estimation*
- S. Malki, L. Spaanenburg and N. Ray: *Image Stream Processing on a Packet-Switched Discrete-Time CNN*
- J. Broekstra, M. Ehrig, P. Haase, F. van Harmelen, M. Menken, P. Miks, B. Schnizler and R. Siebes: *Bibster - A Semantics-Based Bibliographic Peer-to-Peer System*
- G. Infante-Lopez and M. de Rijke: *Alternative Approaches for Generating Bodies of Grammar Rules*
- F.M.T. Brazier, D.R.A. de Groot, A. Oskamp and N.J.E. Wijngaards: *Agent-Based Information Retrieval: Legal and Technical Considerations in a Simple Case*
- M. B. van Riemsdijk, M. Dastani, F. Dignum and J-J. Ch. Meyer: *Dynamics of Declarative Goals in Agent Programming*
- B. Bakker: *Hierarchical Reinforcement Learning Based on Subgoal Discovery and Subpolicy Specialization*
- B. Jansen, T. ten Thij, T. Belpaeme, B. De Vylder and B. de Boer: *Imitation in embodied agents results in self-organization of behavior*
- A. Van Assche, C. Vens and H. Blockeel: *A Random Forest Approach to Relational Learning*
- H. Abbink et. al.: *Automated support for adaptive incident management*
- S. van Splunter, N. Wijngaards, F. Brazier and D. Richards: *Automated Component-Based Configuration: Promises and Fallacies*
- J.J. Sarbo: *Towards a new world-ontology*
- F. de Jonge, N. Roos and J. van den Herik: *Multi-agent Plan-execution Health Repair*
- L.J.M. Rothkrantz, P. Wiggers, F. Flippo, D.Woei-A-Jin and R.J. van Vark: *Multimodal Dialog Management*
- B. Tatomir, H. Dibowski and L. Rothkrantz: *Hierarchical routing in traffic networks*
- K. Boer, M. Polman, A. de Bruin and U. Kaymak: *An Agent-Based Framework for Artificial Stock Markets*
- A.W.A. Spek and H.J. van den Herik: *AI support by Intelligent Documents*
- J. Broekens, N. Netten and D. DeGroot: *Consistent Dynamic-Group Emotions for Virtual Characters*
- J. De Beule: *Creating Temporal Categories for an Ontology of Time*
- P.A.N. Bosman and T. Alderliesten: *Bringing IDEAs into practice: optimization in a minimally invasive vascular intervention simulation system*
- Th.M. Hupkens and R.Thaens: *A Multi Agent System for MS Windows using Matlab-enabled Agents*
- R. Jurgelenaite and P. Lucas: *Parameter Estimation in Large Causal Independence Models*

# Overview of Demonstration presentations:

- W. Teepe: *The Secret Prover: Proving Possession of Arbitrary Files While not Giving Them Away*
- C. Jonker, L. v.d.Meij, V. Robu and J. Treur: *Demonstration of a Software System for Automated Multi-Attribute Negotiation*
- P.J. 't Hoen, G. Redekar, V. Robu and J.A. La Poutré: *Visualization of a Market-based Model for Logistics Management in Transportation*
- S. Meijer and T. Verwaart: *Demonstration of a Multi-Agent Simulation Model of Trust in Supply Chains*
- R.J. Grootjans, R. Zwitsersloot and M. Pantic: *An agent framework for teaching an introductory course in AI*
- T. Mahr and M. de Weerdt: *Distributed Agent Platform for Advanced Logistics*
- M. Valstar, M. Pantic and I. Patras: *Facial Action Unit Recognition using Temporal Templates and Particle Filtering with Factorized Likelihoods*
- R.C. Sondak, P. Gaia, L.M. Maat, M. Pantic and M.F. Valstar: *MMI Face Database*
- M. Israël, E.L. van den Broek, P. van der Putten and M.J. den Uyl: *Real time automatic scene classification*