#### PROGRAM BNAIC 2017 - GRONINGEN

#### WEDNESDAY NOVEMBER 8

8:30 – 9:00	REGISTRATION (Ground floor)
9:00 – 9:10	OPENING DAY 1 (Congreszaal)
9.10 - 10.30	PAPER SESSIONS

## MACHINE LEARNING (Congreszaal)

Claudio Reggiani, Yann-Aël Le Borgne and Gianluca Bontemp
Feature selection in high-dimensional dataset using MapReduce
Dirk van der Hoeven and Tim van Erven
Is Exponenential Weights a Special Case of Mirror Descent
Siamak Mehrkanoon and Johan A.K. Suykens
Regularized Semi-Paired Kernel CCA for Domain Adaptation
Lynn Houthuys, Zahra Karevan and Johan A. K. Suykens
Multi-View LS-SVM for Temperature Prediction

# AGENT SYSTEMS (Room 1.04)

Linford Goedschalk, Tibor Bosse and Marco Otte

Get Your Virtual Hands Off Me! - Developing Threatening Agents Using
Haptic Feedback

Vincent Jaco Koeman, Koen Hindriks and Catholijn Jonker
Omniscient Debugging for Cognitive Agent Programs

Lenin Medeiros and Tibor Bosse

An Empathic Agent that Alleviates Stress by Providing Support via Social Media

Mike Ligthart, Olivier Blanson Henkemans, Koen Hindriks and Mark Neerincx Expectation Management in Child-Robot Interaction

#### NATURAL LANGUAGE PROCESSING (Room 1.12)

Mathijs Pieters and Marco Wiering

Comparison of Machine Learning Techniques for Multi-label Genre Classification

Verna Dankers, Aysenur Bilgin and Raquel Fernández

Modelling the Generation and Retrieval of Word Associations with Word Embeddings

Verna Dankers, Aysenur Bilgin and Raquel Fernández

Modelling Word Associations and Interactiveness for Describer Agents in Word-Guessing Games

Nikita Galinkin, Zoltán Szlávik, Lora Aroyo and Benjamin Timmermans Catch Them If You Can: Malicious Behavior Simulation in Deep Question Answering 10:30 – 11:00 COFFEE/TEA (Grand Café)

11:00 – 12:00 KEYNOTE LECTURE (Congreszaal)

## Rineke Verbrugge

Recursive Theory of Mind: Between Logic and Cognition

12:00 – 13:00 LUNCH (Grand Café)

KION MEETING (Room 1.04)

13:00 - 14:00 PAPER SESSIONS

## REINFORCEMENT LEARNING (Congreszaal)

Nico Roos

Learning-based diagnosis and repair

Paul Ozkohen, Jelle Visser, Martijn van Otterlo and Marco Wiering Learning to Play Donkey Kong Using Neural Networks and Reinforcement Learning

Thomas M. Moerland, Joost Broekens and Catholijn M. Jonker
Learning Multimodal Transition Dynamics for Model-Based
Reinforcement Learning

#### AGENT SYSTEMS (Room 1.04)

Bram Wiggers and Harmen de Weerd

The origin of mimicry: Deception or merely coincidence?

Daniel Formolo and C. Natalie Van Der Wal

Simulating Collective Evacuations with Social Elements

Jens Nevens and Katrien Beuls

The Effect of Tutor Feedback in Language Acquisition Models

#### UNCERTAINTY IN AI (Room 1.12)

Remi Wieten, Floris Bex, Linda van der Gaag, Silja Renooij and Henry Prakken Refining a Heuristic for Constructing Bayesian Networks from Structured Arguments

Johan Kwisthout

The Parameterized Complexity of Approximate Inference in Bayesian Networks

Sander Beckers and Joost Vennekens

The Transitivity and Asymmetry of Actual Causation

14:00 – 14:15 COFFEE/TEA (Grand Café)

## NVIDIA DEEP LEARNING WORKSHOP (Room 1.04)

# IPN SIG AI MEETING (Room 1.12)

DEMONSTRATIONS (Rooms 1.08 and 1.09, Central hall 1<sup>st</sup> floor)

Denis Steckelmacher, Hélène Plisnier, Diederik M. Roijers and Ann Nowé
Hierarchical Reinforcement Learning for a Robotic Partially Observable Task

Peter Vamplew, Dean Webb, Luisa M Zintgraf, Diederik M. Roijers, Richard Dazeley, Rustam Issabekov and Evan Dekker

MORL-Glue: A Benchmark Suite for Multi-Objective Reinforcement Learning *Tijn van der Zant* 

RoboCup HQ: A new benchmark focusing on AI, HMI and Autonomous Agents

Manon Legrand, Roxana Radulescu, Diederik M. Roijers and Ann Nowé

The SimuLane Highway Traffic Simulator for Multi-Agent Reinforcement

The SimuLane Highway Traffic Simulator for Multi-Agent Reinforcement Learning

Benjamin Timmermans, Zoltán Szlávik, Manfred Overmeen and Alessandro Bozzon ECrowd: Enterprise Crowdsourcing for Training Cognitive Systems using the Workforce

Jonathan Gerbscheid, Thomas Groot and Arnoud Visser Intelligent News Conversation with the Pepper Robot

# POSTERS (Central hall 1<sup>st</sup> floor)

Diego Alvarez-Estevez and Vicente Moret-Bonillo

A Proposal to Solve Rule Conflicts in the Wang-Mendel Algorithm for Fuzzy Classification Using Evidential Theory

William Kos, Marijn Schraagen, Matthieu Brinkhuis and Floris Bex Classification in a Skewed Online Trade Fraud Complaint Corpus

Laura van der Lubbe and Tibor Bosse

Studying Gender Bias and Social Backlash via Simulated Negotiations with Virtual Agents

Marjolein Troost, Katja Seeliger and Marcel van Gerven

Generalization of an Upper Bound on the Number of Nodes Needed to Achieve Linear Separability in Two-Layer Neural Networks

Kim Veltman, Harmen de Weerd and Rineke Verbrugge

Socially smart software agents entice people to use higher-order theory of mind in the Mod game

Elie Merhej, Steven Schockaert, T. Greg McKelvey and Martine De Cock
Recommending Treatments for Comorbid Patients Using Word-Based and
Phrase-Based Alignment Methods

Davide Dell'Anna, Mehdi Dastani and Fabiano Dalpiaz

Reasoning about Norms Revision

Jerome Renaux, Jan Ramon and Andrea Argentin

I A Hierarchical Bayesian Network for the Optimization of SRM Assays

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Agent-based Model of Crowd Shipping

Hendrik Vincent Koops, W. Bas de Haas, Jeroen Bransen and Anja Volk

Chord Label Personalization through Deep Learning of Integrated Harmonic Interval-based Representations

John Bruntse Larsen and Jørgen Villadsen

An Approach for Hospital Planning with Multi-Agent Organizations

David Stap, Bert Bredeweg and Natasa Brouwer

Gamification for Learning by Modelling in Interactive Learning Environments

16:00 – 16:15 COFFEE/TEA (Grand Café)

16:15 – 17:15 KEYNOTE LECTURE (Congreszaal)

# Luc Steels Digital Replicants and Mind-Uploading

17:45 SOCIAL EVENT: VISIT MARTINITOREN (Martinikerkhof 3)

19:00 CONFERENCE DINNER ('t Feithhuys, Martinikerkhof 10)

#### PROGRAM BNAIC 2017 - GRONINGEN

#### **THURSDAY NOVEMBER 9**

8:30 – 9:00	REGISTRATION (Ground floor)
9:00 – 9:10	OPENING DAY 2 (Congreszaal)

Gleb Polevoy and Mathijs de Weerdt

9:10 - 10:30 PAPER SESSIONS

## GAMES (Congreszaal)

Competition between Cooperative Projects

Gleb Polevoy and Mathijs de Weerdt
Reciprocation Effort Games

Elias Fernández Domingos, Juan Carlos Burguillo and Tom Lenaerts
Reactive Versus Anticipative Decision Making in a Novel Gift-Giving Game

Qing Chuan Ye and Yinggian Zhang

Participation Behavior and Social Welfare in Repeated Task Allocations

#### KNOWLEDGE & REASONING (Room 1.04)

Rijk Mercuur, Virginia Dignum and Catholijn Jonker
Using Values and Norms to Model Realistic Social Agents
Neil Yorke-Smith
Evaluating Intelligent Knowledge Systems
Zhisheng Huang, Jie Yang, Frank Van Harmelen and Qing Hu
Constructing Knowledge Graphs of Depression
Henry Prakken

On the Problem of Making Autonomous Vehicles Conform to Traffic Law

## MACHINE LEARNING (Room 1.12)

David Roschewitz, Kurt Driessens and Pieter Collins
Simultaneous Ensemble Generation and Hyperparameter Optimization for Regression

Marieke van Vugt, Armin Brandt and Andreas Schulze-Bonhage
Tracking Perceptual and Memory Decisions by Decoding Brain Activity
Dimitrios Bountouridis, Dan Brown, Hendrik Vincent Koops, Frans Wiering and Remco
C. Veltkamp

Melody Retrieval and Classification Using Biologically-Inspired Techniques Mostafa Dehghani and Jaap Kamps

Neural Ranking Models with Weak Supervision

10:30 – 11:00 COFFEE/TEA (Grand Café)

11:00 – 12:00 KEYNOTE LECTURE (Congreszaal)

Marco Dorigo

Swarm Robotics: Current Research Directions at IRIDIA

12:00 – 13:00 LUNCH (Grand Café)

13:00 – 14:00 FACT TALKS – FACULTY FOCUSING ON THE FACTS OF ARTIFICIAL INTELLIGENCE (Congreszaal)

Bert Bredeweg
Humanly AI: Creating smart people with AI

Eric Postma
Towards Artificial Human-like Intelligence

Geraint Wiggins
Introducing Computational Creativity

14:00 – 14:15 COFFEE/TEA (Grand Café)

14:15 - 15:45

BNVKI GENERAL ASSEMBLY (Congreszaal)

RESEARCH & BUSINESS SESSION (Room 1.04)

NVIDIA – Guillaume Barat
Target Holding – Jean-Paul van Oosten
Anchormen – Arjen van Wijngaarden
Sim-Cl – Tijn van der Zant
Panel discussion

POSTERS (Central hall 1<sup>st</sup> floor)

Jonathan Hogervorst, Emmanuel Okafor and Marco Wiering
Deep Colorization for Facial Gender Recognition
Henry Maathuis, Luuk Boulogne, Marco Wiering and Alef Sterk
Predicting Chaotic Time Series using Machine Learning Techniques
Daphne Lenders and Willem Haselager
'Well, at least it tried' The Role of Intentions and Outcomes in Ethica

'Well, at least it tried' The Role of Intentions and Outcomes in Ethically Evaluating Robot Actions

Manon Legrand, Roxana Radulescu, Diederik M. Roijers and Ann Nowé

Neural Network Reuse in Deep RL for Autonomous Vehicles among Human

Drivers

Robin Manhaeve

Realtime Road User Detection with Single Pass Deep Learning

Marten Schutten, Marco Wiering and Pamela MacDougall
Balancing Imbalances

Jesse Bakker, Wouter Beek and Erwin Folmer

Should you link(ed) data?

Michiel Van Lancker, Annemie Vorstermans and Mathias Verbeke

Customer Profiling based on Electronic Payment Transaction Data

Sébastien Hoorens, Katrien Beuls and Paul Van Eecke

Constructions at Work! Visualising Linguistic Pathways for Computational Construction Grammar

Stefan Huijser, Niels Taatgen and Marieke van Vugt

Distracted in a Demanding Task: A Classification Study with Artificial Neural Networks

Marco Stam, Charlotte Gerritsen, Ward van Breda and Elias Krainsk
I Assessing the Spatiotemporal Relation between Twitter Data and Violent
Crime

Florian Wimmenauer, Evgueni Smirnov and Matus Mihalak
Distribution-driven Regression Ensemble Construction for Time Series
Forecasting

15:45 – 16:00 COFFEE/TEA (Grand Café)

16:00 – 17:00 KEYNOTE LECTURE (Congreszaal)

Laurens van der Maaten
From Visual Recognition to Visual Understanding

17:00 – 17:30 CLOSING: AWARDS, BNAIC 2018 (Congreszaal)