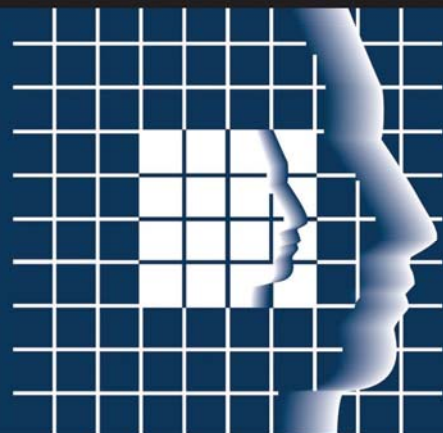


AIME 2007

www.aimedicine.eu/aime07



**11th Conference on Artificial
Intelligence in Medicine
Amsterdam, The Netherlands
7-11 July 2007**



Programme Overview

Saturday 7th July

Rode Hoed

09:30 - 17:30	Doctoral Consortium	Kleine Zaal
09:30 - 17:30	Workshop 1: From Knowledge to Global Care	Keizerzaal
09:30 - 12:30	Tutorial 1: Introduction to Applied Clinical Data Mining	Banningzaal
14:00 - 17:00	Tutorial 2: Advanced Applied Clinical Data Mining	Banningzaal

Sunday 8th July

Rode Hoed

09:00 - 17:30	Workshop 2: Intelligent Data Analysis in bioMedicine and Pharmacology (IDAMAP-2007)	Kleine Zaal
17:30	Gathering at main entrance for the Canal Trip	Main entrance
18:00	Welcome reception (Canal tour)	

Monday 9th July

Rode Hoed, Grote Zaal

09:00 - 09:30	Opening ceremony
09:30 - 10:30	Keynote presentation Michael Berthold, <i>The Fog of Data: Data Exploration in the Life Sciences</i>
11:00 - 12:40	Session I – Agent-based systems
14:00 - 16:05	Session II – Temporal Data Mining
16:30 - 17:45	Session III – Machine learning and KDD
19:00 - 21:30	Poster session, with buffet and wine

Tuesday 10th July

Rode Hoed, Grote Zaal

09:00 - 10:00	Keynote presentation Peter Szolovits, <i>Rationalism and Empiricism in Medical AI</i>
10:00 - 11:15	Session IV – Text Mining, Natural language processing and generation
11:45 - 12:35	Session V – Ontologies
14:00 - 14:50	Session VI – Decision Support Systems
14:50 - 15:40	Session VII – Applications of AI-based Image Processing
16:05 - 17:45	Session VIII – Guidelines
19:45	Conference dinner at the Schreierstoren (see map at end of booklet)

Wednesday 11th July

Rode Hoed, Grote Zaal

09:00 - 10:15	Session IX – Workflow Systems
10:45 - 12:15	Panel discussion – <i>The Coming of Age of AI in Medicine</i>
12:15 - 13:00	Closing ceremony



WELCOME

It was May 2005 when I suggested per email to the AIME board chair that AIME 07 comes to Amsterdam, realizing it would then be exactly 20 years after the inception of the conference series in Marseille (France) 1987. The bids were to be discussed in the AIME board meeting in Aberdeen during AIME 05. Knowing there is much at stake, a good preparation of “the case for Amsterdam” was necessary. Preparation consisted of learning the facts about Amsterdam but also the clichés people wanted to hear about the city. I was even ready to tell white lies (supported with p-values) about the weather in July in The Netherlands.

The meeting was scheduled after the last presentation of that day, which happened to address formal proofs in clinical guidelines. Due to a heated debate among colleagues about the merits of such proofs I was a couple of minutes late to the board meeting. Upon arrival to the meeting and while collecting my breath I was immediately told that the meeting attendants have already chosen Amsterdam to host AIME 07! In my mind I thanked the wooden shoes, the Gouda cheese and the tulips (which originally come from Turkey, by the way).

And now here you are! Welkom en Welcome! As I write, the number of registrations for AIME 07 is approaching 150, and from all over the world. This is a very healthy number for a relatively small, but dedicated, community. I hope that you will all be able to take some time to also explore the riches that Amsterdam and The Netherlands have to offer.

I was very lucky to work together with Riccardo Bellazzi, who was assisted by Marco Torielli and Giorgio Leonardi. As Programme Committee Chair Riccardo has put tremendous amount of time in managing the complex review process. We actually worked as a team discussing issues of form as well as contents. The collaboration was not only effective, it was also much enjoyable! I am very grateful to Jim Hunter for organising the second doctoral consortium and to him and Silvia Miksch for sharing the procedures and materials belonging to the organization of AIME 05. Gita Guggenheim, Ellen Werring, Niels Peek and Winston Tjon Sjoie Sjoie have provided *invaluable* help in the organisation of the conference and I am indebted to each one of them. Organizing such a conference teaches one to answer questions such as “Which conference bags should we use?”, “Should we use these T-shirts for the crew?”, and “What should we do with the badges?” with the effective Eliza-style response “what do *you* think?”

I very much thank the department of Medical Informatics at the Academic Medical Center of the University of Amsterdam for its support in terms of moral, personnel, and finances. Thanks are also due to the following sponsors for their financial support: BAZIS, NWO Physical Sciences, Medecs Decision Support Systems, IOS Press, and Salford systems. The ECCAI is acknowledged for providing their infra-structure to promote the conference.

Let the conference begin!

Ameen Abu-Hanna (Organising Committee Chair).

RECEPTION DESK

The reception desk is located in the Rode Hoed. It will be open at the following times:

Saturday 7th	08:00 - 10:00	13:00 - 14:00	
Sunday 8th	08:30 - 10:00		16:00 - 17:00
Monday 9th	08:00 - 10:00	13:00 - 14:00	17:00 - 18:00
Tuesday 10th	08:00 - 09:30	12:30 - 14:00	17:30 - 18:00
Wednesday 11th	08:00 - 09:00	11:00 - 13:00	



PROGRAMME COMMITTEE CHAIR

Riccardo Bellazzi, Pavia, Italy

ORGANISING COMMITTEE CHAIR

Ameen Abu-Hanna, Amsterdam, The Netherlands

DOCTORAL CONSORTIUM CHAIR

Jim Hunter, Aberdeen, UK

PROGRAMME COMMITTEE

Ameen Abu-Hanna, The Netherlands
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 Paolo Terenziani, Italy
 Samson Tu, USA
 Frans Voorbraak, The Netherlands
 Dongwen Wang, USA
 Thomas Wetter, Germany
 Blaz Zupan, Slovenia
 Pierre Zweigenbaum, France

Local Organization Committee

Ameen Abu-Hanna (Chair), Niels Peek, Gita Guggenheim, Ellen Werring, Winston Tjon Sjo Sjo.

The organising Committee gratefully acknowledges the financial and other help provided by:





DOCTORAL CONSORTIUM

09:30 - 17:30

Kleine Zaal

Chair: Jim Hunter

09:30 Introduction

Jim Hunter

09:30 Session 1

Francesco Sambo. Advanced algorithms for genomic data analysis.

Discussants: Michel Dojat and Jim Hunter

Alessio Bertone. A matter of time: How to visually analyse multivariate (and multi-dimensional) sampled and having multiple granularities.

Discussants: Peter Lucas and Elpida Keravnou

11:00 Break

11:30 Session 2

Patrick Martini. Bridging the gap between narrative text guideline and its computer-interpretable version.

Discussants: Silvana Quaglini and Jim Hunter

Lina Rojas-Barahona. Adapting combinatory categorical grammars and knowledge-based features in a framework for health.

Discussants: Yuval Shahar and Jim Hunter

13:00 Lunch

14:00 Session 3

Giaga Maggenti. An electronic device to help elderly people with their home medications.

Discussants: Elpida Keravnou and Yuval Shahar

Jolita Bernataviciene. Integration of classification and visualization for diagnosis in sports medicine.

Discussants: Silvana Quaglini and Peter Lucas

15:20 Break

15:40 Session 4

Robert Moskovitch. Mining time oriented data via temporal abstraction.

Discussants: Silvia Miksch and Silvana Quaglini

Michael Stacey. An architecture for on-line-multi-dimensional temporal abstraction.

Discussants: Silvia Miksch and Michel Dojat

17:00 General Discussion (*Chair: Jim Hunter*)

17:30 Closing



TUTORIAL 1

09:30 - 12:30

Banningzaal

Introduction to Applied Clinical Data Mining

John H. Holmes, PhD

This tutorial is intended to bring together AIME attendees with an interest or experience in mining medical databases of all kinds, introducing attendees to the practical application of data mining. Using a well-known data mining life cycle as a conceptual framework, attendees will experience first-hand, thorough demonstration and direct participation, the techniques of mining clinical data.

TUTORIAL 2

14:00 - 17:30

Banningzaal

Advanced Applied Clinical Data Mining

John H. Holmes, PhD

This tutorial is intended to provide attendees with an in-depth look at the application and evaluation of data mining methods in several current problem areas in biomedical informatics, specifically population-based epidemiologic surveillance, gene-environment interaction studies, and proteomics.



WORKSHOP 1

09:00 - 17:30

Keizerzaal

From Knowledge to Global Care

Organizers: David Riaño and Fabio Campana

9:30 Reception

9:45 Session I – Data and Knowledge representation and combination

M. Batet, K. Gibert, A. Valls. A data abstraction layer as knowledge provider for a medical multi-agent system.

J. Casals, K. Gibert, A. Valls. Enlarging a medical actor profile ontology with new care units.

F. Real, D. Riaño. Automatic combination of formal intervention plans using SDA* representation model.

10:45 Break

11:15 Session II – Computer-based knowledge generation in health care

D. Sánchez, A. Moreno. Learning medical ontologies from the Web.

D. Riaño, J.A. López-Vallverdú, S. Tu. Mining hospital data to learn SDA* clinical algorithms.

A. Kamisalic, D. Riaño, T. Welzer. Generating macro-temporality in timed transition diagrams.

12:15 End of morning session

13:00 Lunch

14:15 Session III – Knowledge-based health care systems

C. Koutsojannis, I. Hatzilygeroudis. Patient model-based intelligent system for continuing hypertension management.

D. O'Sullivan, K. Farion, S. Matwin, W. Michalowski, S. Wilk. A concept-based evidence retrieval framework for supporting emergency physician decision making at the point of care.

D. Isern, A. Moreno, G. Pedone, L.Z. Varga. Agent-based provision of home care services.

V. K. Mago, M. S. Devi, R. Mehta. Decision making system based on Bayesian Network for an agent diagnosing child care diseases.

15:30 Break

16:00 Session IV: Discussion

17:00 Closing



WORKSHOP 2

09:00 – 17:30

Kleine Zaal

IDAMAP-2007: Intelligent Data Analysis in bioMedicine And Pharmacology

Organizers: Carlo Combi and Allan Tucker

9:00 Opening

Carlo Combi and Allan Tucker

9:15 Invited presentation

Jose Pena

10:00 Paper session: *Probabilistic and Bayesian Analysis*

*** *A Millinghoffer, G Hullam and P Antal.*

On inferring the most probable sentences in Bayesian logic

*** *E Peeling, A Tucker and PAC 't Hoen.*

Discovery of local regulatory structure from microarray gene expression data using Bayesian networks

* *M van Gerven.*

Tensor Decompositions for Probabilistic Classification

10:50 Break

11:20 Paper session: *Feature Selection / Reduction and Visualisation*

*** *S Swift, A Tucker and M Hirsch.*

Improving the Performance of Consensus Clustering Through Seeding: An Application to Visual Field Data

*** *C Fuchsberger, C Chan, S Ongarello, M Sips, I Feuerstein, A Pelzer, G Bonn, G Bartsch and H Klocker.*

Visual Feature Selection in Biological Time-Series for Mass Spectrometry based Biomarker Discovery

* *D Klimov and Y Shahar.*

Intelligent Visualization of Temporal Associations for Multiple Time-Oriented Patients Records

* *F Portet, F Gao, J Hunter and R Quiniou.*

Reduction of Large Training Set by Guided Progressive Sampling. Application to Neonatal Intensive Care Data

12:30 Lunch



14:00 Paper session: Classification and Filtering

- *** *O Luaces, F Taboada, GM Albaiceta and A Bahamonde.*
The Weight of Variable Groups for the Prediction of Probability of Survival in ICU Patients
- *** *M Kukar, D Tzikas and A Likas.*
Using Kernel Based Classifiers for Reliable Predictions in Medical Diagnostics
- *** *V Moustakis, ML Laine, L Koumakis, G Potamias, L Zampetakis and BG Loos.*
Modeling Genetic Susceptibility: a case study in periodontitis
- *** *N Peek, M Verduijn, E de Jonge and B de Mol.*
An empirical comparison of four procedures for filtering monitoring data

15:20 Break

15:40 Paper session: Temporal Datamining / Information Retrieval

- *** *R Azulay, R Moskovitch, D Stopel, M Verduijn, E de Jonge and Y Shahar.*
Temporal Discretization of medical time series - A comparative study
- *** *R Moskovitch, D Stopel, M Verduijn, N Peek, E de Jonge, and Y Shahar.*
Analysis of ICU patients using temporal patterns
- *** *S Andreassen, A Zalounina, L Leibovichi and M Paul.*
Learning susceptibility of a pathogen to antibiotics using data from similar pathogens
- * *MJ O'Connor, RD Shankar and AK Das.*
Reusable Semantic Web-based Methods to Query Temporal Patterns: Application to Clinical Trials Management
- * *C Larizza and P Ciccarese.*
An Extensible Software Framework for Temporal Data Processing
- * *G Tusch, M O'Connor, T Redmond, R Shankar and A Das.*
SPOT – Utilizing Temporal Data for Data Mining in Medicine
- * *L Sacchi, R Bellazzi, S Quaglini, A Sinico and G Moroni.*
Temporal Rules to Predict Renal Flares in Lupus Nephritis

17:30 Closing

18:00 Canal Tour



MAIN PROGRAMME – Monday

Grote Zaal

09:00 Opening Ceremony

Ameen Abu-Hanna, Riccardo Bellazzi

with a welcoming word from Misa Dzoljic, Executive Board of the AMC

09:30 Keynote presentation

Michael Berthold, The Fog of Data: Data Exploration in the Life Sciences

Chair: Ameen Abu-Hanna

10:30 Break

11:00 Session I – Agent-based systems

Chair: Werner Horn

A Human-Machine Cooperative Approach for Time Series Data Interpretation

Thomas Guyet, Catherine Garbay, Michel Dojat

MRF Agent Based Segmentation: Application to MRI Brain Scans

Benoit Scherrer, Michel Dojat, Florence Forbes, Catherine Garbay

R-CAST-MED: Applying Intelligent Agents to Support Emergency Medical Decision

Shizhuo Zhu, Joanna Abraham, Sharoda Paul, Madhu Reddy, John Yen, Mark Pfaff,

Christopher DeFlicht

Knowledge-Based Modeling and Simulation of Diseases with Highly Differentiated Clinical Manifestations.

Marjorie McShane, Sergei Nierenburg, Stephen Beale, Bruce Jarrell, George Fantry

12:40 End of morning session

12:45 Lunch

13:45 Session II – Temporal Data Mining

Chair: Nada Lavrac

An intelligent aide for interpreting a patient's dialysis data set

Derek Sleeman, Nick Fluck, Elias Gyftodimos, Laura Moss, Gordon Christie

Temporal data mining with temporal constraints

Manuel Campos, Jose T. Palma, Roque Mariin

A Nearest Neighbor Approach to Predicting Survival Time with an Application in Chronic Respiratory Disease

Maurice Prijs, Linda Peelen, Paul Bresser, Niels Peek

Using temporal context-specific independence information in the Exploratory Analysis of Disease Processes

Stefan Visscher, Peter Lucas, Ildiko Flesch, Karin Schurink

Discovery and integration of organ-failure episodes in mortality prediction

Tudor Toma, Ameen Abu-Hanna, Robert-Jan Bosman

15:50 Break



16:15 Session III – Machine learning and KDD

Chair: Blaz Zupan

Contrast Set Mining for Distinguishing between Similar Diseases

Petra Kralj, Nada Lavrac, Dragan Gramberger, Anotonija Krstacic

Multi-resolution image parameterization in stepwise diagnostics of coronary artery disease

Matjaz Kukar, Luka Sajn, Ciril Groseelj, Jera Groseelj

Classifying Alarms in Intensive Care- Analogy to Hypothesis Testing

Wiebke Sieben, Ursula Gather

17:30 End of afternoon session

19:00 Poster session with buffet and wine

Chairs: Silvia Miksch and Jim Hunter

Cluster A: Machine Learning and Modelling approaches

A1 Hierarchical Latent Class Models and Statistical Foundation for Traditional Chinese Medicine

Nevin L. Zhang, Shihong Yuan, Tao Chen, Yi Wang

A2 Interpreting Gene Expression Data by Searching for Enriched Gene Sets

Igor Trajkovski, Nada Lavrac

A3 Variable Selection for Optimal Decision Making

Lacey Gunter, Ji Zhu, Susan Murphy

A4 Supporting factors in descriptive analysis of brain ischaemia

Dragan Gamberger, Nada Lavrac

A5 Knowledge Acquisition from a Medical Corpus : Use and Return on Experiences

Lina F. Soualmia, Badisse Dahamna

A6 Machine learning techniques for decision support in anaesthesia

Olivier Caelen, Gianluca Bontempi, Luc Barvais

A7 Learning Decision Tree for Selecting QRS Detectors for Cardiac Monitoring

François Portet, René Quiniou, Marie-Odile Cordier, Guy Carrault

A8 Monitoring Human Resources of a Public Health-Care System through Intelligent Data Analysis and Visualization

Aleksander Pur, Marko Bohanec, Nada Lavrac, Bojan Cestnik, Marko Debeljak, Anton Gradisek

A9 An Integrated IT System for Phenotypic and Genotypic Data Mining and Management

Angelo Nuzzo, Daniele Segagni, Giuseppe Milani, Cinzia Sala, Cristiana Larizza

A10 Automatic retrieval of web pages with standards of ethics and trustworthiness within a medical portal: What a name page tells us

Arnaud Gaudinat, Natalia Grabar, Célia Boyer

A11 A mixed data clustering algorithm to identify population patterns of cancer mortality in Hijuelas-Chile

Eileen Malo, Rodrigo Salas, Monica Catalan, Patricia Lopez



- A12 Novel Features for Automated Lung Function Diagnosis in Spontaneously Breathing Infants
Steffen Leonhardt, Vojislav Kecman
- A13 Multi-level Clustering in Sarcoidosis: A Preliminary Study
V.L.J. Karthaus, H.H.L.M. Donkers, J.C. Grutters, H.J. van den Herik, J.M.M. van den Bosch
- A14 Co-operative agents in analysis and interpretation of intracerebral EEG activity: Application to epilepsy
Ndiaye Mamadou, Kinie Abel, Montois Jean-Jacques
- A15 A Novel Way of Incorporating Large-scale Knowledge into MRF Prior Model
Yang Chen, Wufan Chen, Pengcheng Shi, Yanqiu Feng, Qianjin Feng, Qingqi Wang, Zhiyong Huang
- A16 Predictive Modeling of fMRI Brain States using Functional Canonical Correlation Analysis
S. Ghebream, A.W.M. Smeulder, and P. Adriaans

Cluster B: Ontologies and Text Mining

- B1 Anonymisation of Swedish Clinical Data
Dimitrios Kokkinakis, Anders Thurin
- B2 MetaCoDe: a Lightweight UMLS Mapping Tool
Thierry Delbecque, Pierre Zweigenbaum
- B3 Unsupervised Documents Categorization using New Threshold-Sensitive Weighting Technique
Frederic Ehrler, Patrick Ruch
- B4 Application of cross-language criteria for the automatic distinction of expert and non expert online health documents
Natalia Grabar, Sonia Krivine
- B5 Extracting Specific Medical Data Using Semantic Structures
Kerstin Denecke, Jochen Bernauer
- B6 Replacing SEP-Triplets in SNOMED CT using Tractable Description Logic Operators
Boontawee Suntisrivaraporn, Franz Baader, Stefan Schulz, Kent Spackman
- B7 Building an ontology of hypertension management
Olivier Steichen, Christel Daniel - Le Bozec, Marie-Christine Jaulent, Jean Charlet
- B8 Analyzing Differences in Operational Disease Definitions Using Ontological Modeling
Linda Peelen, Michel CA Klein, Stefan Schlobach, Nicolette F De Keizer, Niels Peek

Cluster C: Decision Support, Guidelines and Workflows

- C1 An Ontology-Driven Agent-Based Clinical Guideline Execution Engine
David Isern, David Sanchez, Antonio Moreno
- C2 Nasopharyngeal Carcinoma Data Analysis with a Novel Bayesian Network Skeleton Learning Algorithm
Alexandre Aussem, Sergio Rodrigues de Morais, Marilys Corbex



- C3 Enhancing Automated Test Selection in Probabilistic Networks
Danielle Sent, Linda C. Van der Gaag
- C4 Content Collection for the Labelling of Health-related Web Content
Konstantinos Stamatakis, Vangelis Metsis, Vangelis Karkaletsis, Marek Ruzicka, Vojtech Svátek, Enrique Amigò Cabrera, Matti Pöllä, Constantine Spyropoulos
- C5 Bayesian Network Decomposition for Modeling Breast Cancer Detection
Marina Velikova, Nivea de Carvalho Ferreira, Peter Lucas
- C6 A Methodology for Automated Extraction of the Optimal Pathways from Influence Diagrams
Alexander Meijer
- C7 Computer-aided assessment of drug-induced lung disease plausibility
Brigitte Seroussi, Jacques Bouaud, Huguette Liote, Charles Mayaud
- C8 Maintaining Formal Models of Living Guidelines Efficiently
Andreas Seyfang, Begona Martinez-Salvador, Radu Serban, Jolanda Wittenberg, Silvia Miksch, Mar Marcos, Annette ten Teije, Kitty Rosenbrand
- C9 A Causal Modeling Framework for Generating Clinical Practice Guidelines from Data
Subramani Mani, Constantin Aliferis
- C10 Semantic Web Framework for Knowledge-Centric Clinical Decision Support Systems
Sajjad Hussain, Samina Raza Abidi, Syed Sibte Raza Abidi
- C11 Inference in the Promedas medical expert system
Bastian Wemmenhove, Joris Mooij, Wim Wiegerinck, Martijn Leisink, Bert Kappen, Jan Neijt
- C12 Computerised guidelines implementation: obtaining feedback for revision of guidelines, clinical data model and data flow
Silvia Panzarasa, Silvana Quaglino, Anna Cavallini, Simona Marcheselli, Mario Stefanelli, Giuseppe Micieli
- C13 Interacting Agents for the Risk Assessment of Allergies in Newborn Babies
Giorgio Leonardi, Silvana Quaglino, Mara de Amici, Mario Stefanelli, Gian Luigi Marseglia, Cristina Torre, Giorgio Ciprandi

Application Demonstration

ProCarSur: A system for dynamic prognostic reasoning in cardiac surgery
Niels Peek, Marion Verduijn, Winston Tjon Sjoer Sjoer, Peter J.M. Rosseel, Evert de Jonge, Bas A.J.M. de Mol

21:30 End of poster session



MAIN PROGRAMME – Tuesday

Grote Zaal

09:00 Keynote presentation

Peter Szolovits, Rationalism and Empiricism in Medical AI
Chair: Riccardo Bellazzi

10:00 Session IV – Text Mining, Natural language processing and generation

Chair: John Holmes

An Experiment in Automatic Classification of Pathological Reports

Janneke van der Zwaan, Erik Tjong Kim Sang, Maarten de Rijke

Literature Mining: Towards Better Understanding of Autism

Tanja Urbancic, Ingrid Petric, Bojan Cestnik, Marta Macedoni-Luksic

Automatic Generation of Textual Summaries from Neonatal Intensive Care Data

Francois Portet, Ehud Reiter, Jim Hunter, Somayajulu Sripada

11:15 Break

11:45 Session V – Ontologies

Chair: Michel Dojat

Using Semantic Web Technologies for Knowledge-Driven Querying in Clinical Trials

Martin O'Connor, Ravi Shankar, Samson TU, Csongor Nyulas, David Parrish, Mark Musen, Amar Das

Categorical Representation of Evolving Structure of an Ontology for Clinical Fungus

Arash Shaban-Nejad, Volker Haarslev

12:35 End of morning session

12:45 Lunch

14:00 Session VI – Decision Support Systems

Chair: Steen Andreassen

Adaptive Optimization of Hospital Resource Calendars

I.B. Vermeulen, S.M. Bohte, S.G. Elkhuisen, J.S. Lameris, P.J.M. Bakker, J.A. La Poutre

On The Behaviour of Information Measures for Test Selection

Danielle Sent, Linda C. van der Gaag

14:50 Session VII – Applications of AI-based Image Processing

Chair: Catherine Garby

Segmentation Techniques for automatic region extraction: an application to aphasia

Maria Grazia Albanesi, Silvia Panzarasa, Barbara Cattani, Sara Dezza, Mario Maggi, Silvana Quaglini

A Pattern Recognition approach to Diagnose Foot Plant Pathologies: From Segmentation to Classification

Marco Mora, Mary Carmen Jarur, Leopoldo Pavesi, Eduardo Achu, Horacio Drut

15:40 Break



16:05 Session VIII – Guidelines

Chair: Yuval Shahar

Formalizing ‘Living Guidelines’ using LASSIE: A Multi-step Information Extraction Method

Katherina Kaiser, Silvia Miksch

The Role of Model Checking in Critiquing based on Clinical Guidelines

Perry Groot, Arjen Hommersom, Peter Lucas, Radu Serban, Annette ten Teije, Frank van Harmelen

Integrating Document-based and Knowledge-based Models for Clinical Guideline Analysis

Gersende Georg, Marc Cavazza

Document-Oriented Views of Guideline Knowledge Bases

Samson Tu, Shantha Condamoor, Tim Mather, Richard Hall, Neill Jones, Mark Musen

17:45 End of afternoon session

19:45 Conference dinner at the Schreierstoren



MAIN PROGRAMME – Wednesday

Grote Zaal

09:00 Session IX – *Workflow Systems*

Chair: Silvana Quaglini

Querying clinical workflows by temporal similarity

Carlo Combi, Matteo Gozzi, Jose M. Juarez, Roque Marin, Barbara Oliboni

Testing Careflow Process Execution Conformance by Translating a Graphical Language to Computational Logic

Federico Chesani, Paola Mello, Marco Montali, Sergio Storari

Induction of Partial Orders to predict Patient Evolutions in Medicine

John A. Bohada, David Riaño, Francis Real

10:15 Break

10:45 Panel Discussion – *The coming of Age of AI in Medicine*

Moderator: Vimla Patel

Edward Shortliffe (Arizona State University, Tempe, USA)

Mario Stefanelli (University of Pavia, Pavia, Italy)

Peter Szolovits (Massachusetts Institute of Technology, Cambridge, MA, USA)

Michael Berthold (University of Konstanz, Konstanz, Germany)

Vimla L. Patel (Arizona State University, Tempe, USA)

12:15 Closing ceremony



WELCOME RECEPTION

Sunday 8th July, 17.30

Meet outside Rode Hoed

Reception on Amsterdam's Canals,
embarking in front of the Rode Hoed.

Boat tickets will be handed out from **17:30**.
The boat will leave at **18:00**.

Please be there in time

...and don't "miss the boat"!

The reception is open to all participants
of the main conference.



CONFERENCE DINNER

Tuesday 10th July, 19.30

Schreierstoren

The second social highlight of the conference will be a reception and Conference Dinner in the magnificent Schreierstoren. The buffet will be open at 20.30 and drinks are free (till 22.30 hours).

Also the dinner is open to all participants of the main conference.

Address:

De Schreierstoren
Prins Hendrikkade 94-5
1012 AE Amsterdam
Tel. + 31 20 4288291
www.schreierstoren.nl



- Travel directions from Schiphol (airport) to Central Station -



The AIME 07 conference will be held in the conference center **De Rode Hoed** (The Red Hat), which is located in a beautiful historic building in the centre of Amsterdam. The main conference will take place in the big hall, a former clandestine church with a great ambiance. Additionally there are four smaller rooms (Keizerzaal, Kleine Zaal, Banning Zaal and Souterrain) which will be used for the tutorials, workshops, and the doctoral consortium which will take place prior to the main conference.

Wireless internet is available in all rooms.

Address:

De Rode Hoed, Keizersgracht 102,

1015 CV Amsterdam.

Tel. +31 -20 638 56 06

Fax.+31 -20 – 625 44 52

Website: www.rodehoed.nl

