Second Call for Papers

Artificial Intelligence in Medicine 2015 (AIME 2015)

Pavia, Italy, June 17-20, 2015

http://aime15.aimedicine.info/

The European Society for Artificial Intelligence in Medicine (AIME) was established in 1986 with two main goals:

1. To foster fundamental and applied research in the application of Artificial Intelligence (AI) techniques to medical care and medical research, and

2. To provide a forum for reporting significant results achieved at biennial conferences.

A major activity of this society has been a series of international conferences, held biennially over the last 24 years.

The AIME 2015 conference will be held in Pavia, Italy.

The AIME 2015 conference will be a unique opportunity to present and improve the international state of the art of AI in Medicine from perspectives of theory, methodology, and application. For this purpose, AIME 2015 will include invited lectures, full and short papers, tutorials, workshops, and a doctoral consortium. Specific attention will be given in the main conference to the theme "AI methods and approaches to address big biomedical data challenges."

Program at a Glance

June 17, 2015: Doctoral Consortium and tutorials
June 18-19, 2015: Main conference programme
June 20, 2015: Workshops

Scope

We invite you to submit original contributions regarding the development of theory, methods, systems, and applications of AI in BioMedicine, including the application of AI approaches in biomedical informatics, healthcare organization and molecular medicine. A specific focus for the AIME 2015 conference is on how Big Data challenges in biomedical domains could be addressed using AI methods and approaches.

Contributions to theory and methods should present or analyse novel AI theories or methodologies for solving problems in the biomedical field. It is equally possible to develop new theories or methods, as well as to extend existing ones. In both cases, the work should demonstrate its utility for solving biomedical problems and highlight its contribution to the underlying theoretical basis. In addition, assumptions and limitations should be discussed, and novelty with respect to the state of the art.

Contributions addressing systems and applications should describe the development, implementation or evaluation of innovative, AI-based tools and systems in the biomedical application domain. These papers should both link the work to underlying theory, and either analyse the potential benefits to solve biomedical problems, or present empirical evidence of benefits in clinical practice.

The scope of the conference includes the following areas:
Big Data Analytics
Clinical Decision Support Systems
Machine Learning, Knowledge Discovery and Data Mining
Biomedical Ontologies and Terminologies
Bayesian Networks and Reasoning under Uncertainty
Temporal and Spatial Representation and Reasoning
Computerized Clinical Practice Guidelines and Protocols
Healthcare Process and Workflow Management
Biomedical Knowledge Acquisition and Knowledge Management
AI methods in Telemedicine and eHealth
Case-based Reasoning in Biomedicine
Document Classification and Information Retrieval
Biomedical Image and Signal Processing
Visual Analytics in Biomedicine
Natural Language Processing
AI solutions for Ambient Assisted Living

Paper Submission

The conference features regular papers, in two categories:
1. Full research papers (up to 10 pages)
2. Short papers (up to 5 pages) describing either:
   a. a short research project
   b. demonstration of implemented systems
   c. late-breaking results (work-in-progress)

Papers should be formatted according to Springer's LNCS format (see www.springeronline.com/lncs or www.springer.de/comp/lncs/authors.html) and submitted through the EasyChair conference system (https://easychair.org/conferences/?conf=aime2015). Authors are asked to submit an abstract first, and upload the full paper one week later.  

The submission website is now open!

All accepted papers will appear in the conference proceedings which will be published as part of Springer's "Lecture Notes in AI" series. In addition, the authors of the best submissions will be invited to expand and refine their papers for possible publication in the Artificial Intelligence in Medicine journal (Elsevier).

Important dates

- Regular and Short Abstract Submission Deadline: January 26, 2015
- Regular and Short Paper Submission Deadline: February 2, 2015
- Proposals for Tutorials: February 8, 2015
- Proposals for Workshops: February 9, 2015
- Notification of Acceptance: March 16, 2015
- Camera-Ready Copy Deadline: April 1, 2015

Mario Stefanelli and Marco Ramoni Best paper awards

The best student paper will receive an award honoring Mario Stefanelli from the University of Pavia and his accomplishments. Mario Stefanelli was one of the founders of the AIME community, an inspiration to us all, and actively helped in advancing young researchers in our
field. Selection of the best student paper will be performed by the Program Committee, and based on the quality of both the paper and the oral presentation at the conference.

The best paper in bioinformatics will receive an award honoring Marco Ramoni. Marco Ramoni was an outstandingly respected faculty member at Harvard, USA, and contributed to significant advances in the biomedical informatics field. Selection of the best paper in bioinformatics will be performed by the Program Committee, based on the quality of the paper.

**Submission of proposals for workshops and tutorials**

As in previous AIME conferences, proposals for the organization of tutorials and satellite workshops are sought regarding any of the above topic areas. Proposals for tutorials and workshops should be sent by email to John H. Holmes (jhholmes@mail.med.upenn.edu).

**More information**

Additional information is available at the conference website: [http://aime15.aimedicine.info/](http://aime15.aimedicine.info/)  

**Organizing Committee**

Program Committee Chair: John H. Holmes, University of Pennsylvania, USA  
Local Organization Chairs: Riccardo Bellazzi and Lucia Sacchi, University of Pavia, Italy  
Doctoral Consortium Chair: Niels Peek, University of Manchester, UK

**Scientific Program Committee**

Raza Abidi, Dalhousie University, Canada  
Ameen Abu-Hanna, University of Amsterdam, The Netherlands  
Klaus-Peter Adlassnig, Medical University of Vienna, Austria  
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Mar Marcos, Universitat Jaume I, Spain  
Roque Marin Morales, University of Murcia, Spain  
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Lucia Sacchi, University of Pavia, Italy
Stefan Schulz, Medical University of Graz, Austria
Brigitte Seroussi, Pierre and Marie Curie University, France
Yuval Shahar, Ben Gurion University, Israel
Brett South, University of Utah, USA
Costas Spyropoulos, Institute of Informatics & Telecommunications, Greece
Gregor Stiglic, University of Maribor, Slovenia
Annette ten Teije, VU University, The Netherlands
Paolo Terenziani, University of Torino, Italy
Samson Tu, Stanford University, USA
Allan Tucker, Brunel University, UK
Alfredo Vellido, Polytechnic University of Catalonia, Spain
Dongwen Wang, University of Rochester Medical Center, USA
Szymon Wilk, Poznan University of Technology, Poland
Blaz Zupan, University of Ljubljana, Slovenia
Pierre Zweigenbaum, Computer Science Laboratory for Mechanics and Engineering Sciences, France