



Organized Special Session
**Image, Signal and Distributed Data Processing
for Networked eHealth Applications**
at INC 2005

Final Call for Papers

In recent years awareness towards the elderly, and the need of constant medical supervision for chronic patients or habitants of remote, isolated and underserved locations has risen. To this end, services that were once available only at few centralized locations, such as high quality medical services, are now intended to be made available through a network anytime, anyplace and to anyone. Moreover, enhanced medical services are pursued even at the major medical centers, through the online collaboration with experts from other major medical centers.

Current telemedicine platforms and applications deal mainly with the transmission of raw medical signals, (i.e. ECG, blood pressure, heart rate, breath rate, oxygen saturation and perspiration) and multimedia communication (i.e. medical images or patient video transmission). Therefore telemedicine applications are quite demanding in terms of network bandwidth and performance, especially in case applications are real time or require wireless transmissions.

Advances in medical image and signal processing in general aim to identify and/or extract all informative characteristics from medical signals, thus allowing a compact data modeling and transmission. In addition to this, advances in the field of distributed data analysis and data mining indicate that it might be possible to process medical information at distributed locations and combine results with minimal requirements for data exchange.

As advances in the field of telecommunications will be covered in the main body of the conference, this session aim to bring together researchers and practitioners working in the other two related fields. Specifically, it will focus on recent advances in the fields of image processing, signal processing and distributed data processing that may contribute to making the consideration of all important informative medical signals in telemedicine applications, as to achieve the offering of enhanced medical services.

The session is expected to concentrate knowledge on an issue that is related to a field with great scientific, economic and social implications that is gaining in received attention. Thus, it is expected that it will be of interest to the general body of conference participants and draw the attention of an audience much broader than the prospective authors. Topics of the session include, but are not limited to:

- Applications for personal management of acute and chronic diseases, wellness, and health, including self-care, self-diagnosis and self-rehabilitation
- eHealth applications
- eHealth internetworking and integrating eHealth
- Sensors and signal processing for eHealth applications
- Customization and seamless integration
- Knowledge sharing between different healthcare groups
- Emerging engineering issues of eHealth applications and mobile health care provision
- Healthcare Intelligence Solutions
- Intranet and Internet Healthcare Solutions
- Medical Decision Support Systems and Diagnostic Decision Making Systems
- Medical Image and Data Compression
- Healthcare Content Management solutions for KM

Important dates

Manuscript submission: **February 1, 2005**
Notification of review results: March 4, 2005
Camera ready paper: March 20, 2005
Authors' registration: March 25, 2004
Conference dates: July 5-7, 2005

Venue

Doryssa Bay Resort,
Samos Island, Greece
<http://www.doryssa-bay.gr/>

Submission information

Authors are invited to submit their full papers by email directly to the session organizers, by February the 1th, 2005. The total length of the paper should not exceed eight pages, including all figures, tables and references. A comprehensive set of instructions for preparing camera ready papers can be found on the INC2005-FORMAT.pdf file available at [<http://www.inc2005.org/INC2005-FORMAT.pdf>]. Please refer to this before submission. Please use Microsoft Word, or Rich Text Format.

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