

**Call for Papers**  
**ACM Transactions on Intelligent Systems and Technology (ACM TIST)**  
**Special Issue on**  
**Intelligent Systems for Health Informatics**

/\*\*\*\* Due to numerous requests, the submission deadline has been extended to  
December 30, 2011. \*\*\*\*/

The field of health informatics has revolutionized the face of health care in the past decade. Informatics based solutions have not only changed the way in which information is collected and stored but also played a crucial role in the management and delivery of healthcare. Intelligent and automated data processing has never been more important than it is today. In recent years, intelligent systems have emerged as a promising tool for solving problems in various healthcare related domains. With the advent of various swift data acquisition systems and recent developments in the health care information technology, huge amounts of data have been amassed in different forms. One of the key challenges in this domain is to build intelligent systems for effectively modeling, organizing and interpreting the available healthcare data. This ACM Transactions on Intelligent Systems and Technology (ACM TIST) special issue seeks articles discussing fundamental principles, algorithms or applications of intelligent data acquisition, processing and analysis of healthcare data. This special issue will respond to the research challenges by encouraging researchers in the computing world to bring to bear novel techniques, combinations of tools, and so forth to build effective ways to handling, retrieving and making use of healthcare data.

Topics of interest include but not limited to:

- Data analytics for clinical care
- Biomarker discovery and biomedical data mining
- Intelligent Medical data management
- Medical signal analysis and processing
- Predictive modeling for personalized treatment
- Data integration for healthcare
- Medical recommender systems
- Optimization models for planning and recommending therapies
- Text mining for biomedical literature and clinical notes
- Intelligent systems for electronic health records
- Computational intelligence methodologies for healthcare
- Computer-aided diagnosis
- Effective Information retrieval for healthcare applications
- Intelligent medical devices and sensors
- Semantic Web, linked data, ontology, and healthcare
- Continuous monitoring and streaming technologies for healthcare
- Collaboration technologies for healthcare
- E-communities, social networks, and social media for patients and caregivers
- Intelligent User-interfaces for medical devices and software
- Visual analytics for healthcare

- Privacy issues in healthcare
- Healthcare workflow management
- Systems for Telemedicine

### Submissions

On-Line Submission (will be available around April 5, 2010 to accept submissions for the second issue): <http://mc.manuscriptcentral.com/tist> (please select “Special Issue: Intelligent Systems for Health Informatics” as the manuscript type). Details of the journal and manuscript preparation are available on the website: <http://tist.acm.org/>

Each paper will be peer-reviewed by at least three reviewers.

### Important Dates

Submission Deadline: ~~November 30, 2011~~ **December 30, 2011**  
Notification of First Review: ~~February 3, 2012~~ **March 5, 2012**  
Submission of Revised Manuscript: ~~March 5, 2012~~ **April 2, 2012**  
Notification of Final Acceptance: ~~April 2, 2012~~ **April 30, 2012**  
Final Manuscript Due: ~~April 30, 2012~~ **May 28, 2012**

### Guest Editors

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