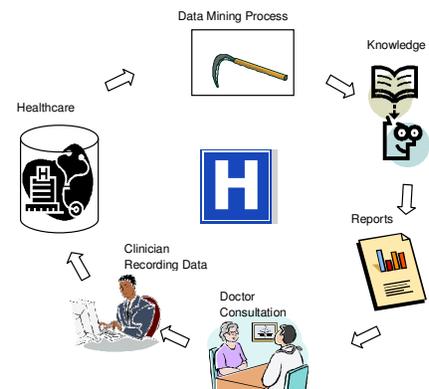# Workshop on Data Mining for Healthcare Management

21 June, 2010 – IIIT Hyderabad, India
Held in conjunction with
The 14th Pacific-Asia Conference on Knowledge Discovery and Data Mining
http://www.cs.umn.edu/~desikan/pakdd2010/dmhm.html

Workshop Description

Data Mining for Healthcare Management (DMHM) has been instrumental in detecting patterns of diagnosis, decisions and treatments in healthcare. Data mining has aided in several aspects of healthcare management including disease diagnosis, decision-making for treatments, medical fraud prevention and detection, fault detection of medical devices, healthcare quality improvement strategies and privacy. Data Mining for Healthcare Management (DMHM) is an emerging field where researchers from both academia and industry have recognized the potential of its impact on improved healthcare by discovering patterns and trends in large amounts of complex data generated by healthcare transactions.. This workshop will provide a common platform for discussion of challenging issues and potential techniques in this emergence field of data mining for health care management. It will also serve as a critical and essential forum for integrating various research challenges in this domain and promote collaboration among researchers from academia and industry to enhance the state-of-art and help define a clear path for future research in this emerging area.

Workshop Program	
09:00 AM to 10:00 AM	Registration
Session 1: Applications in Genomics and Overall Healthcare	
10:00 AM to 10:15 AM	Introduction and Welcome
10:15 AM to 11:00 AM	**Invited Talk – "*Genomic Data: A Health Care IT perspective*"** *Dr. Rajagopal Srinivasan (TCS Innovation Labs)*
11:00 AM to 11:30 AM	Data Mining Based Predictive Models for Overall Health Indices *Ridhima Rajkumar and Kyong Shim*
11:30 AM to 11:45 AM	*Tea Break*
Session 2: Data Mining for Disease Detection	
11:45 AM to 12:15 AM	Designing Patient-Specific Seizure Detectors From Multiple Frequency Bands of Intra-cranial EEG Using Support Vector Machines *Haimonti Dutta, David Waltz, Ansaf Salleb Aouissi, Catherine A Schevon and Ronald Emerson*
12:15 PM to 12:45 PM	Classification, Treatment and Management of Alzheimer's Disease Using Various Machine Learning Methods. *P Sandhya Joshi, G G Vibhudendra Simha, P Deepa Shenoy, K R Venugopal and L M Patnaik.*
12:45 PM to 01:15 PM	Exploration of Classification Techniques as a Treatment Decision Support Tool for Patients with Uterine Fibroids *Kevin Campbell, N. Marcus Thygeson and Stuart Speedie*
01:15 PM to 02:15 PM	*Lunch*
Session 3: Framework for Healthcare Management	
02:15 PM to 03:00 PM	**Invited Talk – "*A Framework for Healthcare management: Challenges and Future Directions.*"** *Sravan Kumar (Cognizant Technology Innovation Practice)*
03:00 PM to 03:30 PM	Risk Mining in Healthcare: Building a Knowledge Base of Health Risk Patterns *Mika Timonen, Paula Silvonen and Lauri Seitsonen*
03:30 PM to 03:45 PM	Development of Ontological Framework for Mobile Health Services. *M. Saravanan, G.Prasad, K.S.Yeshwanth and B. Venkatesh*
03:45 PM to 04:00 PM	*Tea Break*
Session 4: Theory and discussion	
04:00 PM to 04:30 PM	Topological Invariants of an Arterial Pulse *Aniruddha Joshi, Sharat Chandran, Amod Jog, Valadi Jayaraman and Bhaskar Kulkarni.*
04:30 PM to 04:45 PM	Applying Bagging with Heterogeneous Algorithms to Health Care Data. *Kuo-Wei Hsu*
04:45 PM to 05:30 PM	Closing Discussion

Workshop Organization Chairs

Dr. Prasanna Desikan
Cardiac Device Telematics
Boston Scientific

Prof. Jaideep Srivastava
Computer Science & Engineering
University of Minnesota

Prof. Ee-Peng Lim
School of Information Systems
Singapore Management University

Workshop Registration

http://www.iiit.ac.in/conferences/pakdd2010/registration.php