The 1st International Conference on **Health Information Science (HIS'12)**

April 8-10, 2012 Beijing • China

中澳社会计算与电子健康联合实验室















HIS'12 Conference Program Booklet

Welcome to HIS2012, the 1st International Conference on Health Information Science, held on April 8-10 in Beijing, China. HIS aims to integrate computer science/information technology with health sciences & services, embracing information science research coupled with topics related to the modeling, design, development, integration, and management of health information systems.

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Conference Organization

General Co-Chairs:

Yanchun Zhang, Chinese Academy of Science & Victoria University Gultekin Ozsoyoglu, Case Western Reserve University, USA

Program Co-Chairs:

Xiaohui Liu, Brunel University, UK Elizabeth Krupinski, University of Arizona, USA Jing He, Victoria University, Australia

Workshop/panel/tutor Co-Chairs:

David Hansen, Australia e-health Research Centre Guangyan Huang, Victoria University

Local arrangement Co-chairs:

Xiaofeng Meng, Renmin University of China
Jing Yang, Graduate University, Chinese Academy of Science

Financial Chair:

Jing He, Victoria University

Publication Chair:

Guandong Xu, Victoria University

Publicity Co-Chairs:

Haolan Zhang, NIT, Zhejiang University Huiru Zhang, University of Ulster, UK

Conference Program

Sunday, April 8th, 2012

2:00-6:00PM	Registration and social activity (e.g., local tour around Olympic Park)
	Welcome Reception
	Theme on Olympic Bird's Nest Restaurant,
	Level 3, Bird's Nest/Olympic Stadium, 1 National Stadium South
	Road, Chaoyang District, Beijing (Near to Beichen East Road)
	鸟巢奥运主题餐厅
7:00-9:00PM	朝阳区国家体育场南路 1 号鸟巢 3 楼(近北辰东路)
	Walk toward Bird's Nest through the landscape avenue between Pangu
	Plaza and the Water Cube till arriving at Exit H (Northeast), where
	Restaurant staff will lead the way.
	从盘古大观和水立方中间的景观大道穿到鸟巢, 英文字母 H 口东北
	入口处有餐厅工作人员带入。

Monday, April 9th, 2012

Opening

8:40-9:00AM	Chair message and opening addresses
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Keynotes

	Keynote 1: Telehealth Strategies and Information Technology
	Transform Patient Care within the U.S. Department of Veterans
9:00-9:45AM	Affairs
	Leonard Goldschmidt, Department of Veterans Affairs Palo Alto Health
	Care System & Stanford University Medical School, USA
	Keynote 2: From Clinical Data to Knowledge Mining for Decision
9:45-10:30AM	Making within Hospitals
	Michael Steyn , Royal Brisbane & Women's Hospital, Australia

Tea Break and Photo

10:30-10:50AM	Tea break and Photo

Session 1: Healthcare Data Management

Session Chair: Prof. Xiaohui Liu

10:50-11:15AM	Building Socioemotional Environments in Metaverses for Virtual Teams in Healthcare: A Conceptual Exploration Xiaodan Yu, Yong Shi, Dawn Owens, Deepak Khazanchi
11:15-11:40AM	Integrating Healthcare-related Information using the Entity-Attribute-Value Storage Model Dortje Löper, Meike Klettke, Ilvio Bruder, Andreas Heuer
11:40-12:05PM	Median Polish with Power Transformations as an Alternative for the Analysis of Contingency Tables with Patient Data Frank Klawonn Ostfalia, Katja Crull, Frank Pessler, Akiko Kukita
12:05-12:30PM	An Integrated Approach for Healthcare Planning over Dimensional Data using long-term Prediction

Lunch

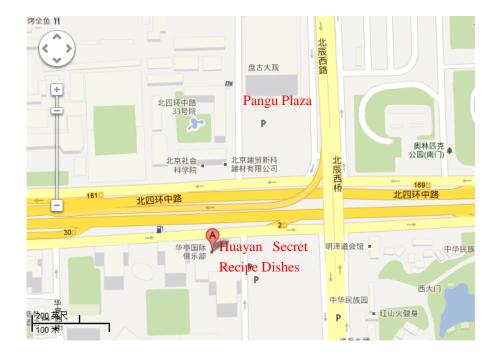
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朝阳区北四环中路 6号华亭会所国际俱乐部 B1 楼(近鸟巢)

12:30~2:00PM Huayan Secret Recipe Dishes

Bulding B1, Huating International Club, North Fourth Ring Road,

Chaoyang District, Beijing



Session 2: Medical Image Analysis Session Chair: Prof. Xiaofeng Meng

2:00-2:25PM A Novel Automated Recognition System Based on Medical
Hao Lan Zhang, Weitao Jiang, Huiqin Wu, and Libing Shu

	Color Image Sharing Method based on Lagrange's Interpolating
2:25-2:50PM	Polynomial
	Guiqiang Chen, Jianjun Liu, Wang Liqin
	Automation in Cytomics: A Modern RDBMS Based Platform
	for Image Analysis and Management in High-Throughput
2:50-3:15PM	Screening Experiments
	Enrique Larios Vargas, Kuan Yan, Fons Verbeek, Ying Zhang,
	Fabian Groffen, Zi Di, Sylvia Le Devedec
	MRF Reconstruction of Retinal Images for The Optic Disc
3:15-3:40PM	Segmentation
	Ana G. Salazar-Gonzalez, Yongmin Li, Djibril Kaba
3:40-4:05PM	Normalized Cut Segmentation of Thyroid Tumor Image Based
	on Fractional Derivatives
	Jie Zhao, Li Zhang, Wei Zheng, Hua Tian, Dong-mei Hao,
	Song-hong Wu

Tea Break and Demo/Software

	- Baby Careware: A Fulltime Secured Health Consultant
	Yanjun Cui, Yanping Zhou, Huan Mei, Zheng Zhao
	- Mobile applications to wards prevention and management of chronic
4.05 4.20DM	disease
4:05-4:30PM	Hang Ding, Marlien Varnfield, Mohan Karunanithi
	- A Healthcare Information System with Augmented Access Controls
	Nagajyothi Gunti, Weiqing Sun, Mingzhe Xu, Zidong Liu, Mohammed
	Niamat, Mansoor Alam

Session 3: Human Genetic/Physiological/Behavior Data Analysis Session Chair: Dr. David Hansen

	Cellular Neural Networks for Gold Immunochromatographic
4:30-4:55PM	Strip Image Segmentation
	Nianyin Zeng, Zidong Wang, Yurong Li, Min Du
4.55.5.20DM	A New Classification Method for Human Gene Splice Sites
4:55-5:20PM	Prediction

	Dan Wei, Weiwei Zhuang, Qingshan Jiang, Yanjie Wei
5:20-5:45PM	Association Rule Analysis for Complex Physiological and Genetic Data Jing He, Yanchun Zhang, Guangyan Huang, Yefei Xin, Xiaohui Liu, Haolan Zhang, Xin Jin, Stanley Chiang, Hailun Zhang
5:45-6:10PM	Analysis of Nursery School Observations for Understanding Children's Behavior Jien Kato, Yu Wang

Banquet

	Dazhaimen (Huixin Beili)
	Building 3, Huixin Beili, Chaoyang, Beijing (Rome Garden East)
	正院大宅门(惠新北里总店)
6:30-8:50PM	朝阳区惠新北里 3 号楼(罗马花园东)
	Banquet: 7:00PM-9:30PM
	(Bus departure at 6:30PM from Pangu and at
	9:00-9:30PM from Dazhaimen)

Tuesday, April 10th, 2012

Panel Discussion

	Medical Devices and Data Processing
	Moderator: Terry Young, Brunel University, UK
	Members:
	Dr. Guiqing Lily Yao, University of Birminghan,UK
	Dr. David Hansen, Australian e-health Research Centre, Australia
9:00-10:30AM	Dr. Stanley Tian-Lin Chiang, Northcote Clinics, Australia
	Prof. Jie Liu, Beijing Jiaotong University, China
	Prof. Xiaofeng Meng, Renmin University, China
	Panel Statements:
	1) Terry Young, Medical Devices: Panel Discussion
	2) Guiqing Lily Yao, Investigating the Value of E-Prescribing

Systems in English Hospitals 3) <i>David Hansen</i> , Challenges and Opportunities for Health
Information Systems Research
4) Stanley Chiang, E-Health in Australia - A General Practitioner's Perspective

Tea Break and Demo/Software

	- Baby Careware: A Fulltime Secured Health Consultant		
10:30-11:00AM	Yanjun Cui, Yanping Zhou, Huan Mei, Zheng Zhao		
	- Mobile applications to wards prevention and management of		
	chronic disease		
	Hang Ding, Marlien Varnfield, Mohan Karunanithi		
	- A Healthcare Information System with Augmented Access Controls		
	Nagajyothi Gunti, Weiqing Sun, Mingzhe Xu, Zidong Liu,		
	Mohammed Niamat, Mansoor Alam		

Session 4: Computer-Aided Disease Detection and Diagnosing Session Chair: Dr. Guiqing Lily Yao

11:00-11:25AM	Epidemic Outbreak and Spread Detection System Based on Twitter Data Xiang Ji, James Geller, Soon Ae Chun
11:25-11:50AM	A Lightweight Approach for Extracting Disease-Symptom Relation with MetaMap toward Automated Generation of Disease Knowledge Base TAKASHI OKUMURA, Yuka Tateisi
11:50-12:15PM	Novel Hybrid Feature Selection Algorithms for Diagnosing Erythemato-squamous Diseases Juanying Xie, Jinhu Lei, Weixin Xie, Xinbo Gao, Yong Shi, Xiaohui Liu

Closing

Michael Steyn – Royal Brisbane & Women's Hospital, Australia



Biography- Dr. Michael Steyn was trained in Scotland in both General Practice and Anaesthesia. He was appointed to a Consultant Post in Anaesthesia at the St Andrews Centre for Plastic Surgery & Burns, Chelmsford. He has completed an MSc in Public Health which focused on Education and Training in the Conduct and Utilisation of Public Health Research. He joined the Royal Brisbane & Women's Hospital in 2003 and now holds the position of Director and continues his interest in Burns. He also helped setup the Queensland Statewide Anaesthesia and Perioperative Medicine Clinical Network (SWAPNET) and was the inaugural Chair. Michael sits on the Queensland Health CIO's Clinical Informatics Steering Committee and is the Clinical Sponsor and Project Executive for the Queensland Statewide Automatic Anaesthetic Record Keeping Project. In addition he chairs the Australian eHealth Research Centre's "Research, Investment Advisory Committee".

Leonard Goldschmidt – Department of Veterans Affairs Palo Alto Health Care System & Stanford University Medical School, USA



Biography- Dr. Leonard Goldschmidt has been involved in developing projects in Telehealth and Medical Informatics with the U.S. Department of Veterans Affairs, the largest integrated health care system in the United States. These activities have included telehealth mediated care of patients with spinal cord injury, integration of images within the computerized medical record, triage of selected medical conditions and providing patient health education using health kiosks, as well as remote screening for diabetic retinopathy, glaucoma, and macular degeneration. He received his medical training at Case Western Reserve University and his Ophthalmology training at the Univ. of California, San Francisco. He directs the Eye Clinic at the Livermore, California division of the Department of Veterans Affairs Palo Alto Health Care System and has a clinical faculty appointment at Stanford Univ. Medical School.

Hotel Locations

Foreign Experts Hotel,

8 Huayan Beili, the North 4th Ring Road, Chaoyang District, Beijing, China 北京外国专家大厦

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