



CONFERENCE PROGRAM



ADVANCING INFORMATICS

for healthcare and healthcare applications

Conference Location:
University of Arizona
College of Medicine - Phoenix campus
435 N 5th Street, Phoenix, AZ USA

DAY ONE

8:00 - 9:00 am	Conference Registration	C204
9:00 - 9:05 am	Opening Remarks by Dr. Raghu Santanam, Arizona State University	C204
9:10 - 9:50 am	Session 1: Keynote Speech, Dr. Hsinchun Chen, University of Arizona Regents' Professor: "National Science Foundation and Smart and Connected Health (SCH): Overview and Case Study"	C204
9:50 - 10:10 am	Coffee Break	
10:10 - 12:15 pm	Session 2: Big Data and Smart Health	C204
12:15 - 1:45 pm	Lunch Break	Auditorium
1:50 - 3:40 pm	Session 3: Health Data Analysis and Management	C204
3:40 - 4:00 pm	Coffee Break	
4:00 - 5:30 pm	Session 4: Healthcare Intelligent Systems and Clinical Practice	C204
5:30 - 6:00 pm	Authors set up for Meet the Authors Poster Session	Auditorium
6:00 - 7:30 pm	Session 5: Meet the Authors Poster Session and Conference Reception	Auditorium

DAY TWO

8:00 - 8:30 am	Conference Registration	C204
8:30 - 10:20 am	Session 6: Medical Monitoring and Information Extraction	C204
10:20 - 10:40 am	Coffee Break	
10:40 - 12:25 pm	Session 7: Clinical and Medical Data Mining	C204
12:25 - 12:30 pm	Conference Close	C204
12:30 - 1:15 pm	Lunch Break	Auditorium
1:15 - 1:45 pm	Optional Tour of Health Sciences Education Building	Meet in Auditorium



DAY ONE : TUESDAY, NOVEMBER 17, 2015

SESSION 1

OPENING SESSION

ROOM C204

9:00 - 9:50 AM

Opening Remarks (5 min.)

Dr. Raghu Santanam, Arizona State University

Keynote Address (45 min.)

Dr. Hsinchun Chen, University of Arizona Regents' Professor: "The National Science Foundation and Smart and Connected Health (SCH): Overview and Case Study." *Session Chair: Raghu Santanam.*

COFFEE BREAK

9:50 - 10:10 AM

SESSION 2

BIG DATA + SMART HEALTH

ROOM C204

10:10 - 12:15 PM

Session Chair: Mohd Anwar

- Electronic Health Records and Patient Activation – Their Interactive Role in Medication Adherence. *Long Paper*
Authors: Yunfeng Shi, Veronica Fuentes-Caceres, Megan McHugh, Jessica Greene, Nina Verevkina, Lawrence Casalino and Stephen Shortell
- Health-related Spammer Detection on Chinese Social Media. *Authors: Xinhuan Chen, Yong Zhang, Jennifer Xu, Chunxiao Xing and Hsinchun Chen.* *Long Paper*
- Chronic Knowledge Retrieval and Smart Health Services Based on Big Data. *Authors: Ye Liang, Chunxiao Xing, Yong Zhang and Chao Li.* *Long paper*
- When A Teen's Stress Level Comes to The Top/Bottom: A Fuzzy Candlestick Line Based Approach on Micro-blog. *Authors: Yiping Li, Ling Feng and Zhuonan Feng.* *Long Paper*
- Linking Obesity and Tweets. *Authors: Mohd Anwar and Zhuoning Yuan.* *Long Paper*
- Social Dynamics of the Online Health Communities for Mental Health. *Authors: Ronghua Xu and Qingpeng Zhang.* *Long Paper*
- Impact of Flavor on Electronic Cigarette Marketing in Social Media. *Authors: Yunji Liang, Xiaolong Zheng, Daniel Zeng and Xingshe Zhou.* *Short Paper*

LONG PAPERS: All long papers have 15 minutes of presentation time followed by 2-3 minutes for questions.

SHORT PAPERS: All short papers have 12 minutes of presentation time followed by 2-3 minutes for questions.



DAY ONE : TUESDAY, NOVEMBER 17, 2015

LUNCHEON BUFFET **AUDITORIUM** **12:15-1:45 PM**

SESSION 3
HEALTH DATA ANALYSIS + MANAGEMENT **ROOM C204** **1:50-3:40 PM**

Session Chair: James Ma

- Skin Resistance as a Physiological Indicator for Quadriplegics with Spinal Cord Injuries During Activities of Daily Living. *Authors: Shruthi Suresh, Han Duerstock and Bradley Duerstock.* *Long Paper*
- Smart Health: Medication Abuse & Addiction. *Author: Upkar Varshney.* *Short Paper*
- Real-Time Prediction of Blood Alcohol Content using Smartwatch Sensor Data. *Authors: Mario Gutierrez, Michelle Fast, Anne Ngu and Byron Gao.* *Long Paper*
- Time and Economic Burden of Comorbidities among COPD Inpatients. *Authors: Jiaqi Liu, James Ma, Jiaojiao Wang, Daniel Zeng, Hongbin Song, Ligui Wang and Zhidong Cao.* *Short Paper*
- How Price Affect Online Purchase Behavior in Online Healthcare Consulting? Perceived Quality as a Mediator. *Authors: Jianwei Liu and Qiang Ye.* *Short Paper*
- Stress Quantification and Sleep Quality Assessment Using a Wearable Device for Daily Feedback to Improve Stress Management. *Authors: Jesus Garcia-Mancilla and Victor M. Gonzalez.* *Short Paper*
- Index of Difficulty between Multiple Joint Movements Using Fitts Law. *Authors: Neeraj Gupta, Siva Dantu and Ram Dantu.* *Short Paper*

COFFEE BREAK **3:40 - 4:00 PM**

LONG PAPERS: All long papers have 15 minutes of presentation time followed by 2-3 minutes for questions.
SHORT PAPERS: All short papers have 12 minutes of presentation time followed by 2-3 minutes for questions.



DAY ONE : TUESDAY, NOVEMBER 17, 2015

SESSION 4 ROOM C204 4:00 - 5:30 PM HEALTHCARE INTELLIGENT SYSTEMS + CLINICAL PRACTICE

Session Chair: Xin Li

- DiabeticLink: An Internationally Collaborative Cyber-Enabled Patient Empowerment Platform. *Authors: Grace Samtani, Lubaina Maimoon, Joshua Chuang, Casper Nybroe, Xiao Liu, U.K. Wiil, Sh Li and Hsinchun Chen.* Long Paper
- MedC: A Literature Analysis System for Chinese Medicine Research. *Authors: Xin Li, Yu Tong and Wen Wang.* Long Paper
- Design of a Mobile Application to Support Non-Pharmacological Therapies for People with Alzheimers Disease. *Authors: Angie K. Reyes, Jorge E. Camargo and Gloria Díaz.* Long Paper
- A Speech-Based Mobile App for Restaurant Order Recognition and Low-Burden Diet Tracking. *Authors: Xiaochen Huang and Emmanuel Agu.* Short Paper
- DRSTI: A Workbench for Querying Retinal Image Data of Age-related Macular Degeneration Patients. *Authors: Abhinav Parakh, Parvathi Chundi and Mahadevan Subramaniam* Long Paper

SET-UP FOR POSTER SESSIONS AUDITORIUM 5:30 - 6:00 PM

SESSION 5 AUDITORIUM 6:00 - 7:30 PM MEET THE AUTHORS : POSTER SESSION + ALL CONFERENCE RECEPTION

The reception includes a hosted bar, h'ors d'oeuvres, and the opportunity to speak with conference authors and network with colleagues old and new. All authors are encouraged to post their work and may post up to twelve slides on the poster boards provided. In addition, two accepted Posters will be presented:

- ◆ An Approach to Automate Health Monitoring in Compliance With Personal Privacy. *Author: Nikolay Kazantsev*
- ◆ Interoperability Standards of Applications Proposed for the Health Sector. *Authors: Octavio Salcedo Parra and Brayan Reyes.*

*LONG PAPERS: All long papers have 15 minutes of presentation time followed by 2-3 minutes for questions.
SHORT PAPERS: All short papers have 12 minutes of presentation time followed by 2-3 minutes for questions.*



DAY TWO : WEDNESDAY, NOVEMBER 18, 2015

SESSION 6 ROOM C204 8:30 - 10:20 AM MEDICAL MONITORING + INFORMATION EXTRACTION

Session Chair: Gerasimos Spanakis

- SilverLink: Smart Home Health Monitoring for Senior Care. *Authors: Joshua Chuang, Lubaina Maimoon, Shuo Yu, Hongyi Zhu, Casper Nybroe, Owen Hsiao, Shu-Hsing Li, Hsinmin Lu and Hsinchun Chen.* Long Paper
- Real-Time Models to Predict the Use of Vasopressors in Monitored Patients. *Authors: André Braga, Filipe Portela, Manuel Filipe Santos, António Abelha, José Machado, Fernando Rua Martins and Álvaro Silva.* Long Paper
- Mobile Cloud Computing as an Alternative for Monitoring Child Mental Disorders. *Authors: Shavely S. Pusey, Jorge E. Camargo and Gloria Díaz.* Long Paper
- Network Analysis of Ecological Momentary Assessment Data for Monitoring and Understanding Eating Behavior. *Authors: Gerasimos Spanakis, Gerhard Weiss, Anne Roefs and Bastiaan Boh.* Long Paper
- Chronic Disease Related Entity Extraction in Online Chinese Question & Answer Services. *Authors: Yan Zhang, Yong Zhang, Yanshen Yin, Jennifer Xu, Chunxiao Xing and Hsinchun Chen.* Long Paper
- Sentiment Analysis on Chinese Health Forums: A Preliminary Study of Different Language Models. *Authors: Yan Zhang, Yong Zhang, Jennifer Xu, Chunxiao Xing and Hsinchun Chen.* Long Paper

COFFEE BREAK 10:20 - 10:40 AM

SESSION 7 ROOM C204 10:40 - 12:25 PM CLINICAL + MEDICAL DATA MINING

Session Chair: Nan Kong

- Clustering Analysis on Patient-Physician Communication and Shared Decision-Making during Cancer Prognosis Discussion. *Authors: Yikang Li, Yuxuan Liu, Nan Kong and Cleveland Shields.* Long Paper

LONG PAPERS: All long papers have 15 minutes of presentation time followed by 2-3 minutes for questions.
SHORT PAPERS: All short papers have 12 minutes of presentation time followed by 2-3 minutes for questions.



DAY TWO : WEDNESDAY, NOVEMBER 18, 2015

SESSION 7, continued

- Need for a Specialized Metamodel for Biomedical and Health Informatics Domain. *Authors: Rishi Kanth Saripalle.* *Short Paper*
- Predicting Pre-triage Waiting Time in a Maternity Emergency Room through Data Mining. *Authors: Sónia Pereira, Filipe Portela, Manuel Filipe Santos, José Machado and António Abelha.* *Long Paper*
- A Game Theoretic Predictive Modeling Approach to Reduction of False Alarm. *Authors: Fatemeh Afghah, Abolfazl Razi, S.M.Reza Soroushmehr, Somayeh Molaei, Hamid Ghanbari and Kayvan Najarian.* *Long Paper*
- Information Credibility : A Probabilistic Graphical Model for Identifying Credible Influenza Posts on Social Media. *Authors: Qiaozhen Guo, Wanye Huang, Kai Huang and Xiao Liu.* *Long Paper*
- Arrhythmia Classification using Biosignal Analysis and Machine Learning Techniques. *Authors: Jesus E. Nivia, Yesika M. Ramirez, Jorge E. Camargo.* *Long Paper*

CONFERENCE CLOSE **ROOM C204** **12:25 - 12:30 PM**

LUNCHEON **AUDITORIUM** **12:30 - 1:15 PM**

A box lunch is available. Folks who wish to grab and go may do so, or seating for more leisurely dining is available in the Auditorium. Lunch will be followed by the optional tour of the Health Sciences Education Building.

OPTIONAL TOUR **HEALTH SCIENCES EDUCATION BLDG** **1:15 - 1:45 PM**

We are offering an optional tour folks who are interested in seeing the Phoenix campus' new Health Sciences Education Building. The tour can accommodate up to about 15 people on a first come-first served basis.

LONG PAPERS: All long papers have 15 minutes of presentation time followed by 2-3 minutes for questions.

SHORT PAPERS: All short papers have 12 minutes of presentation time followed by 2-3 minutes for questions.



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