The First IEEE Conference on Connected Health: Applications, Systems and Engineering Technologies
June 27-29, 2016, Washington DC, USA

CHASE 2016 Program at a Glance

Day 1 (June 27, 2016)--Workshops

Room	**Salon B**	**Salon C**
8:00 – 9:00	**Breakfast**	
9:00 – 10:30	**CCH 2016 & SEARCH 2016** **Session 1: Cloud Connected Health**	**MedSPT 2016:** **Keynote**
10:30 – 11:00	**Coffee Break**	
11:00 – 12:30	**CCH 2016 & SEARCH 2016** **Session 2: Cloud Connected Health and Safe, Energy-Aware, & Reliable Connected Health**	**MedSPT 2016:** **Session 1: Security & Detection**
12:30 – 14:00	**Lunch**	
14:00 – 16:00	**BIGDATA4HEALTH 2016** **Session 1: eHealth in Cloud Environment**	**MedSPT 2016:** **Session 2: Security Medical CPS Design**
16:00 – 16:30	**Coffee Break**	
16:30 – 17:30	**BIGDATA4HEALTH 2016** **Session 2: Novel Applications on Smart and Mobile Devices**	

Day 2 (June 28, 2016)—Conference

Room	**Salon B & C**
7:00 – 8:00	**Breakfast**
8:00 – 8:20	**Open Remarks** Chair: Weisong Shi & Honggang Wang
8:20 – 9:20	Keynote Speech: Title: The Internet of Medical Things to Enable Medical Cyber-Physical Systems Prof. Insup lee
9:20 – 9:40	**Coffee Break**
Room	**Salon B & C**
9:40 – 12:00	Session 1 (**Applications**)
12:00 – 13:30	**Lunch**
13:30 – 15:00	**Panel 1: Current and future opportunities for, challenges, and barriers to adoption of connected healthcare**
15:00 – 15:30	**Coffee Break**
15:30 – 17:30	Session 2 (**Systems & Applications)**
Room	**Salon B & C**
18:00 – 20:00	**Demo/Poster/Reception (Ballroom Foyer & Salon A)**

Day 3 (June 29, 2016)

Room	**Salon B & C**
7:00 – 8:00	**Breakfast**
8:00 – 9:00	Keynote Speech: An expanding and expansive view of computing, and the human-technology frontier Prof. Jim Kurose
9:00 – 9:30	**Coffee Break**
Room	**Salon B & C**
9:30 – 12:00	Session 3 (**Applications**)
12:00 – 13:30	**Lunch**
13:30 – 15:00	**Panel 2: The Role of Standards: Tackling the Barriers to Adoption of Interoperable Connected Healthcare**
15:00 – 15:30	**Coffee Break**
15:30 – 17:30	Session 4 (**Engineering & Applications**)
Room	**Salon B & C**
17:45 – 18:15	**Closing session**

CHASE 2016 Technical Program

Day 1 (June 27, 2016)

Room	Salon B	Salon C
9:00-10:30	**CCH 2016 & SEARCH 2016** **Session 1: Cloud Connected Health**	**MedSPT 2016:** **Keynote**
10:30-11:00	**Coffee Break**	
11:00-12:30	**CCH 2016 & SEARCH 2016** **Session 2: Cloud Connected Health and Safe, Energy-Aware, & Reliable Connected Health**	**MedSPT 2016:** **Session 1: Security & Detection**
12:30 – 14:00	**Lunch**	
14:00-16:00	**BIGDATA4HEALTH 2016** **Session 1: eHealth in Cloud Environment**	**MedSPT 2016:** **Session 2: Security Medical CPS Design**
16:00 –16:30	**Coffee Break**	
16:30-17:30	**BIGDATA4HEALTH 2016** **Session 2: Novel Applications on Smart and Mobile Devices**	

CCH 2016 & SEARCH 2016

Session 1: Cloud Connected Health

A Mobile Solution for Fast and Accurate Medical Emergency Reporting
Esraa Ibrahim Aboul Safa (Faculty of Commerce Alexandria University, Egypt); Ghada El Khayat (Alexandria University, Egypt)

Equal Area User Clustering Algorithm for Energy Efficient Cellular Network
Hailu Belay Kassa (AAU, Ethiopia); Shanko Aredo (Hawassa University, Ethiopia); Estifanos Yohannes Menta (Hawassa Institute of Technology (HIoT), Hawassa University, Ethiopia); Dereje H. Woldegebreal (Addis Ababa University, Addis Ababa Institute of Technology, Ethiopia); Yacob Astatke, Farzad Moazzami and Wondimu Zegeye (Morgan State University, USA)

Reliable Transport Protocol based on Loss-Recovery and Fairness for Wireless Body Area Networks.
Richard Jaramillo (École Polytechnique de Montréal & Département de Génie Informatique et Logiciel, Canada); Alejandro Quintero and Steven Chamberland (Ecole Polytechnique de Montreal, Canada)

Automatic Assessment of Environmental Hazards for Fall Prevention Using Smart-Cameras.
Jeffrey Kutchka (University of Arkansas, USA); Danielle Tchuinkou Kwadjo (Camertronix, Cameroon); Joel Mandebi Mbongue (University of Arkansas, USA); Erman Nghonda Tchinda (Camertronix, Cameroon); Christophe Bobda (University of Arkansas, USA)

Stroke Prediction Context-Aware Health Care System.
Hamid Mcheick (University of Quebec at Chicoutimi, Canada), Hoda Nasser (Lebanese University, Lebanon), Mohamed Dbouk (Lebanese University, Lebanon), Ahmad Nasser (American University of Beirut, Lebanon)

CCH 2016 & SEARCH 2016

Session 2: Cloud Connected Health and Safe, Energy-Aware, & Reliable Connected Health

Transforming Healthcare through Life-long Personal Digital Footprints.
Magnus Stenhaug (Univ of Tromsø, Norway); Håvard Johansen and Dag Johansen (University of Tromsø, Norway)

Architectural approaches for implementing Clinical Decision Support Systems in Cloud: A Systematic Review.
Luis Tabares Perez (Cafeto Software, Colombia); Jhonatan Hernandez Silva (Axede, Colombia); Ivan Mauricio Cabezas (Universidad de San Buenaventura & Sociedad Colombiana de Computacion, Colombia)

ManageMyCondition: A Standard Framework for the Development of Cloud-based Medical Condition Management Applications.
Cristiano Tapparello and Wendi Heinzelman (University of Rochester, USA); Kelly Conn (St. John Fisher College, USA); Craig Mullen (University of Rochester Medical Center, USA)

A Patient Centered Cloud Platform for Mobile-Health Enabled Clinical Research.
Bradley Witbrodt (Emory Univerisity, USA); Vaidy Sunderam (Emory University, USA, USA)

Addressing Provenance issues in Big Data Genome Wide Association Studies (GWAS).
David Lauzon (École de Technologie Supérieure, Canada); Alain April (ETS Engineering University, Canada); Beatriz Kanzki (Ecole de Technologie Supérieure & CRCHUM, Canada); Victor Dupuy (École de Technologie Supérieure, Canada); Michael Phillips, Johanne Tremblay and Pavel Hamet (Centre de Recherche du Centre Hospitalier de Université de Montréal, Canada)

BIGDATA4HEALTH 2016:

Session 1: eHealth in Cloud Environment

Clustering Cancer Data by Areas between Survival Curves
Dechang Chen (Uniformed Services University of the Health Sciences, USA); Huan Wang (The George Washington University, USA); Donald Henson (The Uniformed Services University of the Health Sciences, USA); Li Sheng (Drexel University, USA); Matthew Hueman (Walter Reed National Military Medical Center, USA); Arnold Schwartz (The George Washington University Medical Center, USA)

Large Scale Cloud-Based Deformable Registration for Image Guided Therapy
Shahram Mohrehkesh (Temple University, USA); Nikos Crisochoides (Old Dominium University, USA); Fotis Drakopoulos and Arun Brahmavar Vishwanatha (Old Dominion University, USA); Ron Kikinis (Brigham and Women's Hospital and Harvard Medical School & Surgical Planning Laboratory, USA); Andriy Fedorov (Brigham and Women's Hospital & Harvard Medical School, USA)

A Mobile Cloud Computing Model Using the Cloudlet Scheme for Big Data Applications
Lo'ai A. Tawalbeh (Um al Qura University, Saudi Arabia); Waseem Bakheder (Umm Al-Qura University, Saudi Arabia); Houbing Song (West Virginia University & West Virginia Center of Excellence for Cyber-Physical Systems, USA)

BIGDATA4HEALTH 2016:

Session 2: Novel Applications on Smart and Mobile Devices

BigEAR: Inferring the Ambient and Emotional Correlates from Smartphone-based Acoustic Big Data
Harishchandra Dubey and Kunal Mankodiya (University of Rhode Island, USA); Matthias R. Mehl (University of Arizona, USA)

Bring biomedical ontologies to personalized healthcare: a smart inquiry framework
Guangzhi Zhang, Rongfang Bie and Yunchuan Sun (Beijing Normal University, P.R. China)

MedSPT 2016:

Session 1: Security & Detection

Automatic Tampering Detection Paradigm to Support Personal Health Record
Abdul Razaque (Cleveland State University, USA); Muder Almiani (Al-Hussein Bin Talal University, Jordan); Fathi Amsaad (University of Toledo, USA); Vijay Chand Mannava (Cleveland State University, USA); Nandan Lahurikar and Pavan Teja Kilari (Cleveland State, USA)

Cloud-based Secure Logger For Medical Devices
Hung Nguyen, Bipeen Acharya, Radoslav Ivanov, Andreas Haeberlen and Linh Thi Xuan Phan (University of Pennsylvania, USA); Oleg Sokolsky (UPenn, USA); Jesse Walker (Intel Corporation, USA); James Weimer (University of Pennsylvania, USA); C. William Hanson (Perelman School of Medicine, USA); Insup Lee (University of Pennsylvania, USA)

Lightweight Detection of On-body Sensor Impersonator in Body Area Networks (BAN)
Liping Xie (Guangxi University, P.R. China); Weichao Wang (University of North Carolina at Charlotte, USA); Tuanfa Qin (Nanjing University, P.R. China)

Distributed Network Intrusion Detection Systems: An Artificial Immune System Approach
Obinna Igbe (City University of New York, USA); Ihab Darwish (14 Livingston Court & City College, USA); Tarek Saadawi (The City University of New York/The City College, USA)

MedSPT 2016:

Session 2: Security Medical CPS Design

Implementing Informed Consent as Information-Flow Policies for Secure Analytics on eHealth Data: Principles and Practices
Andes Gjerdrum, Håvard Johansen and Dag Johansen (University of Tromsø, Norway)

Towards Realizing a Self-Protecting Healthcare Information System
Qian Chen and Jonathan Lambright (Savannah State University, USA); Sherif Abdelwahed (Mississippi State University, USA)

Design of A Secure, Biofeedback, Head-and- Neck Posture Correction System
Da-Yin Liao (Straight & Up Innovations Group Co., USA)

The study of the Enhanced External Counterpulsation system based on smart clothes
Ting-Kai Wu (Chang Gung University, Taiwan)

Day 2 (June 28, 2016)

<table>
<tr><td>Room</td><td>Salon B & C</td></tr>
<tr><td>8:00 – 8:20</td><td>Open Remarks
Chair: Weisong Shi & Honggang Wang</td></tr>
<tr><td>8:20-9:20</td><td>Keynote Speech: (Chair: Prof. Honggang Wang, UMass Dartmouth)
“The Internet of Medical Things to Enable Medical Cyber-Physical Systems”
Prof. Insup lee</td></tr>
<tr><td>9:20-9:40</td><td>Coffee Break</td></tr>
<tr><td>Room</td><td>Salon B & C</td></tr>
<tr><td>9:40-12:00</td><td>Session 1: Applications (Session Chair: Gang Zhou, College of William & Mary)
<table>
<tr><td>Identifying Rare Diseases from Behavioural Data: A Machine Learning Approach</td><td>Haley MacLeod, Shuo Yang, Kim Oakes, Kay Connelly and Sriraam Natarajan (Indiana University, USA)</td></tr>
<tr><td>Automated Functional and Behavioral Health Assessment of Older Adults with Dementia</td><td>Mohammad Alam (University of Maryland Baltimore County & Mobile, Pervasive and Sensor Computing Lab, USA); Nirmalya Roy and Sarah Holmes (University of Maryland Baltimore County, USA); Aryya Gangopadhyay (University of Maryland Baltimore County (UMBC), USA); Elizabeth Galik (University of Maryland, USA)</td></tr>
<tr><td>Kalman-Filter-Based Walking Distance Estimation for a Smart-Watch</td><td>Young Soo Suh (University of Ulsan, Korea); Ebrahim Nemati and Majid Sarrafzadeh (UCLA, USA)</td></tr>
<tr><td>Heart Rate Monitoring In Electrocardiogram Wearable Devices during Intense Physical Activities Using A Motion Artifact Corrupted Signal Reconstruction Algorithm</td><td>Seyed Mohamad Amin Salehizadeh, Yeonsik Noh and Ki Chon (University of Connecticut, USA)</td></tr>
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<tr><td>iHearFood: Eating Detection Using Commodity Bluetooth Headsets</td><td>Yang Gao (University of Massachusetts Lowell, USA); Ning Zhang, Honghao Wang and Xiang Ding (University of Massachusetts, Lowell, USA); Xu Ye and Guanling Chen (University of Massachusetts Lowell, USA); Cao Yu (The University of Massachusetts Lowell, USA)</td></tr>
<tr><td>A Survey of Secure Multiparty Computation Protocols for Privacy Preserving Genetic Tests</td><td>Tamara Dugan (Purdue University Indianapolis, USA); Xukai Zou (School of Science, Purdue University-Indianapolis, USA)</td></tr>
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<tr><td>12:00-13:30</td><td>Lunch</td></tr>
<tr><td>13:30-15:00</td><td>Panel 1: Ki Chon Moderator
Current and future opportunities for, challenges, and barriers to adoption of connected healthcare
Edward W. Boyer, Ki Chon, Florence D. Hudson, Wendy Nilsen</td></tr>
<tr><td>15:00 – 15:30</td><td>Coffee Break</td></tr>
<tr><td>Room</td><td>Salon B & C</td></tr>
<tr><td>15:30-17:30</td><td>Session 2: Systems & Applications (Session Chair: Prof. Mooi Choo Chuah, Lehigh Univ.)
<table>
<tr><td>MotionScale: A Body Motion Monitoring System Using Bed-Mounted Wireless Load Cells</td><td>Musaab Alaziz (WINLAB, Rutgers University & University of Basrah, USA); Zhenhua Jia (WINLAB, Rutgers University, USA); Jian Liu (Stevens Institute of Technology, USA); Richard Howard (Rutgers University, USA); Yingying Chen (Stevens Institute of Technology, USA); Yanyong Zhang (Rutgers University, USA)</td></tr>
<tr><td>Smartphone Based Digital Stethoscope for Connected Health - A direct Acoustic Coupling Technique</td><td>Arijit Sinharay (Tata Consultancy Services Ltd., India); Deb Ghosh (Tata Consulting Services, India); Parijat Deshpande (Tata Consultancy Services, India); Shahnawaz Alam (TCS Innovation Lab Kolkata, India); Rohan Banerjee and Arpan Pal (Tata Consultancy Services, India)</td></tr>
<tr><td>Enhanced Wearable Medical Systems for Effective Blood Glucose Control</td><td>Jialin Gao (Shanghai Jiao Tong Univerisity, P.R. China); Ping Yi (Shanghai Jiao Tong University, P.R. China); Zicheng Chi (University of Maryland, USA); Ting Zhu (University of Maryland, Baltimore County, USA)</td></tr>
<tr><td>Real-time Tidal Volume Estimation using Iso-surface Reconstruction</td><td>Shane Transue and Phuc Nguyen (University of Colorado Denver, USA); Tam Vu (University of Colorado Denver & University of Colorado, Denver, USA); Min-Hyung Choi (University of Colorado Denver, USA)</td></tr>
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	Motion and Noise Artifact-Tolerant Atrial Fibrillation Detection using a Smartphone — Jo Woon Chong (Texas Tech University & Texas Tech University, USA); Chae Ho Cho (University of Connecticut, USA); Nada Esa and David McManus (University of Massachusetts Medical Center, USA); Ki Chon (University of Connecticut, USA) Multiple- vs Non- or Single-Imputation based Fuzzy Clustering for Incomplete Longitudinal Behavioral Intervention Data — Zhaoyang Zhang (University of Masschusetts Medical School, USA); Hua Fang (University of Massachusetts Medical School, USA)
Room	**Salon B & C**
18:00 – 20:00	**Demo/Poster/Reception (Ballroom foyer)**

Demo papers: (total: 5)

1. **Developing Medical Condition Management Applications using ManageMyCondition**
   Cristiano Tapparello and Wendi Heinzelman (University of Rochester, USA); Kelly Conn (St. John Fisher College, USA); Craig Mullen (University of Rochester Medical Center, USA)

2. **MyPalmVein: A Palm Vein-based Low-cost Mobile Identification System For Wide Age Range**
   Jie Cao (Wayne State University, USA); Weisong Shi (Wayne State Universiry, USA); Abdulbaset Salim and Paul Kilgore (Wayne State University, USA)

3. **CyberCare: A Novel Electronic Health Record Management System**
   Nida Butt (Pace University, USA); Juan Shan (Pace University & Pace University, USA)

4. **Securely Sharing Encrypted Medical Information**
   Kurt Rohloff (New Jersey Institute of Technology & NJIT, USA); Arnab Deb Gupta, Yuriy Polyakov and Gerard Ryan (New Jersey Institute of Technology, USA)

5. **Flappy Breath: A Smartphone-Based Breath Exergame**
   Matthew Stafford (University at Buffalo, USA); Feng Lin (University at Buffalo, SUNY, USA); Wenyao Xu (SUNY Buffalo, USA)

Poster Papers: (total: 18)

1. **Utilizing ICT tools when developing healthcare processes and action plans for special needs children**
   Dena Hussain (University West, Sweden)

2. **Central Blood Pressure Monitoring via an Automatic Arm Cuff**
   Jiankun Liu, Keerthana Natarajan and Mingwu Gao (Michigan State University, USA); Hao-min Cheng, Shih-Hsien Sung and Chen-Huan Chen (National Yang-Ming University, Taiwan); Jin-Oh Hahn (University of Maryland, USA); Rama Mukkamala (Michigan State University, USA)

3. **User Centric Design for Aging Population: Early Experiences and Lessons**
   Lanyu Xu and Heather Fritz (Wayne State University, USA); Weisong Shi (Wayne State Universiry, USA)

4. **Tracking the Diffusion of Contact-Induced Disease from Social Interactions and Limited Observations of Symptoms**
   Le Fang (State University of New York at Buffalo); Tong Guan (The State University of New York at Buffalo, USA); Wen Dong (University at Buffalo, SUNY, USA); Chunming Qiao (State University of New York at Buffalo, USA)

5. **Cardiovascular Risk Predictors Estimation via Carotid Tonometry and Ankle Cuff Oscillation Measurement**
   Jongchan Lee, Zahra Ghasemi and Chang-Sei Kim (Univerity of Maryland, USA); Jin-Oh Hahn (University of Maryland, USA); Rama Mukkamala (Michigan State University, USA); Hao-min Cheng, Chen-Huan Chen and Shih-Hsien Sung (National Yang-Ming University, Taiwan)

6. **iDr: An Intelligent Digital Ruler App for Remote Wound Assessment**
   Adam Yee (TJHSST & Xyken, LLC, USA); Guy Marti (Johns Hopkins University School of Medicine, USA); John Harmon (Johns Hopins University School of Medicine, USA); Steven Yi (Xyken, LLC, USA); Mihir Patel and Ethan Wu (TJHSST, USA)
7. **Connected heart rate sensors to monitor sleep quality**
   Mathieu Simonnet (Telecom Bretagne & UMR CNRS 6285 / Lab-STICC, France); Romain Billot and Bernard Gourvennec (Telecom Bretagne, France)

8. **Toward E-Health Applications for Suicide Prevention**
   Sofian Berrouiguet, Romain Billot, Philippe Lenca and Philippe Tanguy (Telecom Bretagne, France); Enrique Baca-Garcia (Fundacion Jimenez Diaz Hospital, Spain); Mathieu Simonnet (Telecom Bretagne & UMR CNRS 6285 / Lab-STICC, France); Bernard Gourvennec (Telecom Bretagne, France)

9. **Realizing Optimal Chest Compression Fraction During Cardiopulmonary Resuscitation**
   Josh Talkington and Ram Dantu (University of North Texas, USA)

10. **A Cloud-based System for Dust Allergic Patients using CotS Sensors**
    Omar Alfandi (University of Goettingen & Zayed University, Germany); Omar Shaya, Pouya Saeedfar and Arne Bochem (University of Goettingen, Germany)

11. **Derivative Spectroscopy in Non-Invasive Blood-Glucose Analysis**

Ram Dantu (University of North Texas, USA); Vishnu Dantu (Brown University, USA)

12. **Index of Difficulty between Multiple Joint Movements Using Fitts Law**
    Neeraj Gupta (University of Texas at Dallas, USA); Siva Dantu (University of Texas Medical Branch, USA); Ram Dantu (University of North Texas, USA)

13. **Real-time Low-complexity Fall Detection System On Android Platform**
    Weihao Qu (University at Buffalo, USA); Feng Lin (University at Buffalo, SUNY, USA); Wenyao Xu (SUNY Buffalo, USA)

14. **Detecting out-of-bed activities to prevent pneumonia for hospitalized patient using Microsoft Kinect V2**
    Liang Liu and Sanjay Mehrotra (Northwestern University, USA)

15. **A Deep Learning Method for Microaneurysm Detection in Fundus Images**
    Juan Shan (Pace University & Pace University, USA); Lin Li (University of Seattle, USA)

16. **A Simultaneous Key Generation Technique For Health Information Exchange (HIE) Based On Existing Patients' Credentials**
    Ahmed Ibrahim (University of Kentucky, USA); Mukesh Singhal (University of California at Merced, USA)

17. **Automatic Detection of Periods of Eating from Wrist Motion Data**
    Surya Sharma, Phillip Jasper, Eric Muth and Adam Hoover (Clemson University, USA)

18. **Microsleep Prediction Using an EKG Capable Heart Rate Monitor**
    Amanda Watson and Gang Zhou (College of William and Mary, USA)

Day 3 (June 29, 2016)

<table>
<tr><td>Room</td><td>Salon B & C</td></tr>
<tr><td>8:00-9:00</td><td>Keynote Speake 2 (Chair: Prof. Weisong Shi, Wayne State University)
NSF Perspective on Smart and Connected Communities Initiative
Prof. Jim Kurose</td></tr>
<tr><td>9:00-9:30</td><td>Coffee Break</td></tr>
<tr><td>Room</td><td>Salon B & C</td></tr>
<tr><td>9:30-12:00</td><td>Session 3: Applications (Session Chair: Prof. Ki Chon, University of Connecticut)

<table>
<tr><td>Clinician-in-the-Loop Annotation of ICU Bedside Alarm Data</td><td>Alexander Roederer (University of Pennsylvania, USA); Joseph Dimartino (Penn Presbyterian Medical Center, USA); Jacob Gutsche (Penn Presbyterian Medical Center and Perelman School of Medicine, USA); Margaret Mullen-Fortino (Thomas Jefferson University Hospital, USA); Sachin Shah (Penn Medicine Information Services, USA); C. William Hanson (Perelman School of Medicine, USA); Insup Lee (University of Pennsylvania, USA)</td></tr>
<tr><td>Using Wi-Fi Signals to Characterize Human Gait for Identification and Activity Monitoring</td><td>Yan Li (UMBC & JHU, USA); Ting Zhu (University of Maryland, Baltimore County, USA)</td></tr>
<tr><td>Recognizing Eating Gestures Using Context Dependent Hidden Markov Models</td><td>Yiru Shen, Eric Muth and Adam Hoover (Clemson University, USA)</td></tr>
<tr><td>Sensing from the Bottom: Smart Insole Enabled Paitent Handling Activity Recognition Through Manifold Learning</td><td>Feng Lin (University at Buffalo, SUNY, USA); Chen Song (The State University of New York at Buffalo, USA); Xiaowei Xu (University at Buffalo, SUNY, USA); Wenyao Xu (SUNY Buffalo, USA)</td></tr>
<tr><td>Multiview Bi-Clustering to Identify Smartphone Sensing Features Indicative of Depression</td><td>Asma Ahmad Farhan, Jin Lu, Jinbo Bi, Alexander Russell and Bing Wang (University of Connecticut, USA); Athanasios Bamis (Seldera LLC, USA)</td></tr>
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	Improving Tuberculosis (TB) Diagnostics using Mobile Health Technologies among Resource-poor and Marginalized Communities — Cao Yu (The University of Massachusetts Lowell, USA); Chang Liu (University of Massachusetts-Lowell, USA); Benyuan Liu (University of Massachusetts Lowell, USA); Ning Zhang (University of Massachusetts, Lowell, USA)
12:00-13:30	Lunch
13:30-15:00	**Panel 2: The Role of Standards: Tackling the Barriers to Adoption of Interoperable Connected Healthcare** **Paolo Bonato, Carole C. Carey, Kathy L. Grise, William T. Riley, John R. Zaleski**
15:00-15:30	Coffee Break
Room	**Salon B & C**
15:30-17:30	**Session 4: Engineering & Applications (Session Chair: Prof. Paolo Bonato,** Harvard Medical School**)** A Telemonitoring Framework for Android Devices — Daniel Aranki (UC Berkeley, USA); Gregorij Kurillo (University of California, Berkeley, USA); Adarsh Mani, Phillip Azar, Jochem van Gaalen, Quan Peng, Priyanka Nigam, Maya Reddy, Sneha Sankavaram and Qiyin Wu (UC Berkeley, USA); Ruzena Bajcsy (University of California, USA) A Study of Wearable Sensor Selection, Motion Representation and its Effect on Exercise Classification — Nicholas Hosein (University of California Davis, USA); Soheil Ghiasi (University of California, Davis, USA) TCPM: Topic-based Clinical Pathway Mining — Xiao Xu, Tao Jin, Zhijie Wei, Cheng Lv and Jianmin Wang (Tsinghua University, P.R. China) Real-time Data-driven Gait Phase Detection using Infinite Gaussian Mixture Model and Parallel Particle Filter — Ioannis Papavasileiou (University of Connecticut, USA); Wenlong Zhang (Arizona State University, USA); Song Han (University of Connecticut, USA) The Selection and Validation of Biosensors for Studying a Novel Healthcare Environment — Jesse Schettler (University of Oklahoma & Laureate Institute of Brain Research, USA); Steven R Green (Laureate Institute of Brain Research, USA); Hazem Refai (Oklahoma University, USA); Justin Feinstein (Laureate Institute of Brain Research, USA)

Room	**Salon B & C**
17:45 – 18:15	Closing session