



The Second IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies

July 17-19, 2017, Philadelphia, USA

CHASE 2017 Program at a Glance

Day 1 (July 17, 2017)-Workshops

Registration 8AM - 5PM, Grand Ballroom (1st Floor)

| Room | Red Room (1 st Floor) | Clover (1 st Floor) | Clivden (19 th Floor) |
|---------------|---|--|----------------------------------|
| 9:00-10:30 | CCH 2017 & SEARCH 2017 Session 1: Cloud Connected Health | MedSPT 2017: Keynote | |
| 10:30-11:00 | Coffee Break (1 st Floor) | | |
| 11:00-12:30 | CCH 2017 & SEARCH 2017 Session 2: Cloud Connected Health and Safe, Energy-Aware, & Reliable Connected Health | MedSPT 2017: Session 1: Security & Detection | |
| 12:30 – 14:00 | Lunch (Outside Grand Ballroom) | | |
| 14:00-15:50 | BIGDATA4HEALTH 2017 Session 1: eHealth in Cloud Environment | MedSPT 2017: Session 2: Security Medical CPS Design | Tutorial: Deep Learning |
| 15:00 – 16:10 | Coffee Break (1 st Floor) | | |
| 16:10-17:30 | BIGDATA4HEALTH 2017 Session 2: Novel Applications on Smart and Mobile Devices | | |

Day 2 (July 18, 2017)—Conference**Registration 7AM - 4PM, Grand Ballroom (1st Floor)**

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|---------------|--|
| Room | Grand Ballroom |
| 8:00 – 8:20 | Open Remarks Chair: Paolo Bonato & Mooi Choo Chuah |
| 8:20-9:20 | Keynote Speech 1: TBD William (Bill) Riley Director of the NIH Office of Behavioral and Social Sciences Research |
| 9:20-9:40 | Coffee Break (1st Floor) |
| Room | Grand Ballroom |
| 9:40-12:40 | Session 1 |
| 12:40-14:00 | Lunch (Outside Grand Ballroom) |
| 14:00 - 17:00 | Session 2 |
| Room | Conservatory (12th floor) |
| 18:00-20:00 | Welcome Reception and Demo/Poster |

Day 3 (July 19, 2017)**Registration 7AM - 5 PM, Grand Ballroom (1st Floor)**

| | |
|---------------|--|
| Room | Grand Ballroom |
| 8:00-9:00 | Keynote Speech 2: TBD Paul R. Patrick Emergency Medical Services and Preparedness Director |
| 9:00-9:20 | Coffee Break (1st Floor) |
| Room | Grand Ballroom |
| 9:20-12:20 | Session 3 |
| 12:20-13:30 | Lunch (Outside Grand Ballroom) |
| 13:30 – 15:00 | Panel: Internet of Things in Health and Medicine: Challenges and Opportunities |
| 15:00-15:20 | Coffee Break (1st Floor) |
| 15:20-18:20 | Session 4 |
| Room | Grand Ballroom |
| 18:20 – 18:30 | Closing session |

CHASE 2017 Technical Program

Day 1 (July 17, 2017)

| Room | Red Room (1 st Floor) | Clover (1 st Floor) | Clivden (19 th Floor) |
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| 9:00-10:30 | <u>CCH 2017 & SEARCH 2017</u> Session 1: Cloud Connected Health | <u>MedSPT 2017:</u> Keynote | |
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| 16:10-17:30 | <u>BIGDATA4HEALTH 2017</u> Session 2: Novel Applications on Smart and Mobile Devices | | |

[CCH 2017 & SEARCH 2017](#)

Session 1: Cloud Connected Health

Malaria Parasite Detection and Species Identification on Thin Blood Smears using Convolutional Neural Networks

Kristofer E. Delas Peñas; Pilarita T. Rivera; Prospero C. Naval Jr. (University of the Philippines, Philippines)

Tackling the Fidelity-Energy Trade-Off in Wireless Body Sensor Networks

Murtadha M. N. Aldeer (Rutgers, The State University of New Jersey, USA); Richard Martin and Richard Howard (Rutgers University, USA)

IoT Security (IoTSec) Mechanisms For e-Health and Ambient Assisted Living Applications

Daniel Minoli; Kazem Sohraby (South Dakota School of Mines and Technology, USA); and Ben Occhiogrosso (DVI Communication, USA)

[CCH 2017 & SEARCH 2017](#)

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

Fitness Trackers: Fit for Health but Unfit for Security and Privacy

Hossein Fereidooni (University of Padua, Italy); Tommaso Frassetto, Markus Miettinen and Ahmad-Reza Ahmad-Reza Sadeghi (Technische Universität Darmstadt, Germany); Mauro Conti (University of Padua, Italy)

Optimized and Secured Transmission and Retrieval of Vital Signs from Remote Devices

Shanti Thiagaraja, Ram Dantu, Pradhumna L Shrestha, Mark Thompson and Christopher Smith (University of North Texas, USA)

A Scheduling Scheme for Efficient Wireless Charging of Sensor Nodes in WBAN

Md Khurram Monir Rabby (Bangladesh University of Engineering & Technology), Mohammad S. Alam (Bangladesh University of Engineering & Technology), Shamin Ara Shawkat (University of Tennessee), Mohammed Asadul Hoque (East Tennessee State University)

A New Cryptography Algorithm to Protect Cloud-Based Health Services

Mohammed Aledhari (Western Michigan University), Fahad Saeed (Western Michigan University)

[BIGDATA4HEALTH 2017](#)

Session 1: eHealth in Cloud Environment

Analyzing the Correlations Between the Uninsured and Diabetes Prevalence Rates in Geographic Regions in the United States

Xiao Luo (IUPUI, USA)

Learning to Read Chest X-Ray Images from 16000+ Examples Using CNN

Yuxi Dong, Yuchao Pan and Wei Xu (Tsinghua University, P.R. China)

Clustering Big Cancer Data by Effect Size

Huan Wang (The George Washington University); Dechang Chen (The Uniformed Services University of the Health Sciences); Matthew Hueman (Walter Reed National Military Medical Center, USA); Li Sheng (Drexel University, USA); Donald Henson (The Uniformed Services University of the Health Sciences, USA)

[BIGDATA4HEALTH 2017](#)

Session 2: Novel Applications on Smart and Mobile Devices

A Hybrid Clustering Prediction for Type 1 Diabetes Aid: Towards Decision Support Systems based upon Scenario Profile Analysis

Iván Contreras (Universitat de Girona, Spain); Josep Vehi (University of Girona, Spain); R. Visentin (University of Padova, Spain); M. Vettoretti (University of Padova, Italy)

A Privacy-Preserving Distributed Medical Insurance Claim Clearinghouse & EHR Application

Emmanuel Peters and Nick Maxemchuk (Columbia University, USA)

A Data Preprocessing Technique for Gesture Recognition Based on Extended-Kalman-F
Nada Alharbi; Peter Zeglen; Yu Liang and Dalei Wu (University of Tennessee at Chattanooga, USA)

RESPIRE: A Spectral Kurtosis-based Method to Extract Respiration Rate from Wearable PPG Signals

Harishchandra Dubey (University of Texas at Dallas, USA); Nicholas Constant (204 Coit Ave., USA); Kunal Mankodiya (University of Rhode Island, USA)

[MedSPT 2017](#)

Session 1: Security & Detection

Patient Identity Verification based on Physiological Signal Fusion

Hang Cai (Worcester Polytechnic Institute, USA), Krishna Kumar Venkatasubramanian (Worcester Polytechnic Institute, USA)

Efficient and Privacy-preserving Voice-based Search over mHealth Data

Mohammad Hadian (University of Massachusetts Boston, USA), Thamer Altuwaiyan (University of Massachusetts Boston, USA), Xiaohui Liang (University of Massachusetts Boston & University of Massachusetts Boston, USA), Wei Li (Xiamen University, P.R. China)

Lightweight Key Management for Group Communication in Body Area Networks through Physical Unclonable Functions

Penglin Dong (Guangxi University, P.R. China), Weichao Wang (University of North Carolina at Charlotte, US, USA), Xinghua Shi (University of North Carolina at Charlotte, USA), Tuanfa Qin (Nanjing University, P.R. China)

[MedSPT 2017](#)

Session 2: Security Medical CPS Design

Medical Cyber-Physical Systems Development: A Forensics-Driven Approach

George Grispos (Lero - The Irish Software Research Centre, University of Limerick, Ireland), William Glisson (University of South Alabama, USA), Kim-Kwang Raymond Choo (University of Texas at San Antonio, USA),

On Threat Modeling and Mitigation of Medical Cyber-Physical Systems

Hussain Almohri (Kuwait University, Kuwait), Long Cheng (Virginia Tech, USA), Danfeng Yao (Virginia Tech, USA), Homa Alemzadeh (University of Virginia, USA)

A Novel Authentication Scheme Based on Acceleration Data in WBAN

Bin Liu (University of Science and Technology of China, P.R. China), Hao Luo (University of Science and Technology of China, P.R. China), Chang Wen Chen (State University of New York at Buffalo, USA)

Day 2 (July 18, 2017)

| | | | | | | | | | | | | | |
|---|--|--|---|---|---|---|--|---------------------------------------|--|--|--|--|--|
| Room | Grand Ballroom | | | | | | | | | | | | |
| 8:00 – 8:20 | Open Remarks Chair: Paolo Bonato & Mooi Choo Chuah | | | | | | | | | | | | |
| 8:20-9:20 | Keynote Speech 1: TBD William (Bill) Riley Director of the NIH Office of Behavioral and Social Sciences Research | | | | | | | | | | | | |
| 9:20-9:40 | Coffee Break (1st Floor) | | | | | | | | | | | | |
| Room | Grand Ballroom | | | | | | | | | | | | |
| 9:40-12:40 | <p>Session 1: (Session Chair: Ye Sun, MTU)</p> <table border="1"> <tr> <td>MotionTree: A Tree-Based In-Bed Body Motion Classification System Using Load-Cells</td> <td>Musaab Alaziz; Zhenhua Jia; Richard Howard; Xiaodong Lin; Yanyong Zhang</td> </tr> <tr> <td>Wireless Sensor-Dependent Ecological Momentary Assessment for Pediatric Asthma mHealth Applications</td> <td>Chris Buonocore; Rosemary Rocchio; Alfonso Roman; Christine King; Majid Sarrafzadeh</td> </tr> <tr> <td>BESI: Reliable and Heterogeneous Sensing and Intervention for In-Home Health Applications</td> <td>Ridwan Alam; Joshua Dugan; Nutta Homdee; Neeraj Gandhi; Benjamin Ghaemmaghami; Harshitha Meda; Azziza Bankole; Martha Anderson; Jiaqi Gong; Tonya Smith-Jackson; John Lach</td> </tr> <tr> <td>DAVE: Detecting Agitated Vocal Events</td> <td>Asif Salekin; Hongning Wang; Kristine Williams; John Stankovic</td> </tr> <tr> <td>Thermal-Depth Fusion for Occluded Body Skeletal Posture Estimation</td> <td>Shane Transue; Phuc Nguyen; Tam Vu; Min-Hyung Choi</td> </tr> <tr> <td>Hugsy: A Comforting Solution for Preterm Neonates Designed to Enhance Parent-Child Bonding</td> <td>Sylvie Claes; Miguel Cabral Guerra; Jiachun Du; Lisa Malou Smits; Deedee Kommers; Sidarto Bambang Oetomo</td> </tr> </table> | MotionTree: A Tree-Based In-Bed Body Motion Classification System Using Load-Cells | Musaab Alaziz; Zhenhua Jia; Richard Howard; Xiaodong Lin; Yanyong Zhang | Wireless Sensor-Dependent Ecological Momentary Assessment for Pediatric Asthma mHealth Applications | Chris Buonocore; Rosemary Rocchio; Alfonso Roman; Christine King; Majid Sarrafzadeh | BESI: Reliable and Heterogeneous Sensing and Intervention for In-Home Health Applications | Ridwan Alam; Joshua Dugan; Nutta Homdee; Neeraj Gandhi; Benjamin Ghaemmaghami; Harshitha Meda; Azziza Bankole; Martha Anderson; Jiaqi Gong; Tonya Smith-Jackson; John Lach | DAVE: Detecting Agitated Vocal Events | Asif Salekin; Hongning Wang; Kristine Williams; John Stankovic | Thermal-Depth Fusion for Occluded Body Skeletal Posture Estimation | Shane Transue; Phuc Nguyen; Tam Vu; Min-Hyung Choi | Hugsy: A Comforting Solution for Preterm Neonates Designed to Enhance Parent-Child Bonding | Sylvie Claes; Miguel Cabral Guerra; Jiachun Du; Lisa Malou Smits; Deedee Kommers; Sidarto Bambang Oetomo |
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| 14:00-17:00 | <p>Session 2: (Session Chair: Gang Zhou, College of Williams & Mary)</p> <table border="1"> <tr> <td>Incentivising High Quality Crowdsourcing Clinical Data For Disease Prediction</td> <td>Qinghan Xue; Mooi Choo Chuah</td> </tr> <tr> <td>Classification of Neurological Gait Disorders Using Multi-task Feature Learning</td> <td>Ioannis Papavasileiou; Wenlong Zhang; Xin Wang; Jinbo Bi; Li Zhang; Song Han</td> </tr> <tr> <td>Secure Sequence Similarity Search on Encrypted Genomic Data</td> <td>Md Safiur Rahman Mahdi; Mohammad Zahidul Hasan; Noman Mohammed</td> </tr> <tr> <td>HCNN: Heterogeneous Convolutional Neural Networks for Comorbid Risk Prediction with Electronic Health Records</td> <td>Jinghe Zhang; Jiaqi Gong; Laura E Barnes</td> </tr> <tr> <td>Big Data Discovery for Public Health</td> <td>Yannis Katsis; Natasha Balac; Derek Chapman; Madhur Kapoor; Jessica Block; William G. Griswold; Jeannie Huang; Nikos Koulouris; Massimiliano Menarini; Viswanath Nandigam; Mandy Ngo; Kian Win Ong; Yannis Papakonstantinou; Besa Smith; Konstantinos Zarifis; Steven Woolf; Kevin Patrick</td> </tr> <tr> <td>Boosting for Postpartum Depression Prediction</td> <td>Sriraam Natarajan; Annu Prabhakar; Nandini Ramanan; Anna Baglione; Katie Siek; Kay Connelly</td> </tr> </table> | Incentivising High Quality Crowdsourcing Clinical Data For Disease Prediction | Qinghan Xue; Mooi Choo Chuah | Classification of Neurological Gait Disorders Using Multi-task Feature Learning | Ioannis Papavasileiou; Wenlong Zhang; Xin Wang; Jinbo Bi; Li Zhang; Song Han | Secure Sequence Similarity Search on Encrypted Genomic Data | Md Safiur Rahman Mahdi; Mohammad Zahidul Hasan; Noman Mohammed | HCNN: Heterogeneous Convolutional Neural Networks for Comorbid Risk Prediction with Electronic Health Records | Jinghe Zhang; Jiaqi Gong; Laura E Barnes | Big Data Discovery for Public Health | Yannis Katsis; Natasha Balac; Derek Chapman; Madhur Kapoor; Jessica Block; William G. Griswold; Jeannie Huang; Nikos Koulouris; Massimiliano Menarini; Viswanath Nandigam; Mandy Ngo; Kian Win Ong; Yannis Papakonstantinou; Besa Smith; Konstantinos Zarifis; Steven Woolf; Kevin Patrick | Boosting for Postpartum Depression Prediction | Sriraam Natarajan; Annu Prabhakar; Nandini Ramanan; Anna Baglione; Katie Siek; Kay Connelly |
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| Room | Conservatory (12th floor) | | | | | | | | | | | | |
| 18:00 – 20:00 | Welcome Reception and Demo/Poster | | | | | | | | | | | | |

Demo and poster papers: (total: 36)

- 1. Fog2Fog: Augmenting Scalability in Fog Computing for Health GIS Systems**
Rabindra K. Barik; Harishchandra Dubey; Sapana Sasane; Chinmaya Misra; Nicholas Constant; Kunal Mankodiya
- 2. Does Race Play a Role in Invasive Procedure Treatments? An Initial Analysis**
Noah Hammarlund; Daniel Minoli
- 3. Adaptive Clinical Data Communication for Remote Monitoring in Rural Ambulance Transport**
Mohammad Hosseini; Richard Berlin; Yu Jiang; Lui Sha
- 4. Healthcare Road Map to Modernization in Clouds: Healthcare Forum for Healthcare Professionals, Medical Device Manufacturers, Pharmaceutical Companies and Average People on Virtual Private Clouds**
Mario Li; Jun Feng
- 5. Human Activity Recognition from Sensor-Based Large-Scale Continuous Monitoring of Parkinson's Disease Patients**
Wei-Yi Cheng; Alf Scotland; Florian Lipsmeier; Timothy Kilchenmann; Liping Jin; Jens Schjodt-Eriksen; Detlef Wolf; Yan-Ping Zhang-Schaerer; Ignacio Fernandez Garcia; Juliane Siebourg-Polster; Jay Soto; Lynne Verselis; Meret Martin-Facklam; Frank Boess; Martin Koller; Michael Grundman; Andreas Monsch; Ron Postuma; Anirvan Ghosh; Thomas Kremer; Kirsten Taylor; Christian Czech; Christian Gossens; Michael Lindemann
- 6. Deriving Information from Low Spatial Resolution Floor-Based Personnel Detection System**
Fadi Muheidat; Harry W Tyrer
- 7. Assistive Adjustable Smart Shower System**
Mengxuan Ma; Benjavicha Hotrabhavananda; Justin Hall; Marjorie Skubic
- 8. Quantitative Assessment and Validation of a Stroke Rehabilitation Game**
Mengxuan Ma; Rachel Proffitt; Marjorie Skubic
- 9. Angel-Echo: A Personalized Health Care Application**
Mengxuan Ma; Marjorie Skubic; Karen Ai; Jordan Hubbard
- 10. A Portable Tool for Eye Fatigue Detection**
Jyh-Da Wei; Yuan-Ping Lin; Ming-Feng Wu; Ke-Jun Hong; Yih-Hsiang Wang
- 11. Incorporating Ethics in Internet of Things (IoT) Enabled Connected Smart Healthcare**
Sahil Sholla; Roohie Naaz; Mohammad Ahsan Chishti

- 12. Estimating Bradykinesia in Parkinson's Disease with a Minimum Number of Wearable Sensors**
Jean-Francois Daneault; Sunghoon Ivan Lee; Fatemeh Golabchi; Shyamal Patel; Ludy Shih; Sabrina Paganoni; Paolo Bonato
- 13. A Personalized Pacing System for Real-time Physical Activity Advisor**
Henry Chang; Zhiguo Li; Subhro Das; Hao Tian; Chandramouli Maduri; Chohreh Partovian; James Codella; Ching-hua Chen
- 14. Exercise Evaluation Using Wrist Sensors**
Kewei Sha; Naveen Manoharan; Jiang Lu
- 15. Impressions of Older Patients with Cardiovascular Diseases to Smart Devices for Heart Rhythm Monitoring**
Eric Ding; Dongqi Liu; Apurv Soni; Oluwaseun Adaramola; Dong Han; Syed Khairul Bashar; Yeonsik Noh; Ki Chon; David McManus
- 16. Deep Learning for Categorization of Lung Cancer CT Images**
Allison M Rossetto; Wenjin Zhou
- 17. Patient Associated Motion Detection with Optical Flow using Microsoft Kinect V2**
Liang Liu; Sanjay Mehrotra
- 18. A Novel Finger-Worn Sensor for Ambulatory Monitoring of Hand Use**
Xin Liu; Smita Rajan; Gabriel Hollander; Nathan Ramasarma; Paolo Bonato; Sunghoon Ivan Lee
- 19. RFMiner: Risk Factors Discovery and Mining for Preventive Cardiovascular Health**
Yao Xiao; Ruogu Fang
- 20. VRvisu: A Tool for Virtual Reality Based Visualization of Medical Data**
Sandeep Reddivari; Jason Smith, and Jonathan Pabalate
- 21. Simulating Normal and Abnormal ECG Signals in Children Age 0-16**
Haijia Wang; Zitong Su; Hua Fang
- 22. Using a Minimum Set of Wearable Sensors to Assess Quality of Movement in Stroke Survivors**
Stefano Sapienza; Catherine Adans-Dester; Anne O'Brien; Gloria Vergara Diaz; Sunghoon Ivan Lee; Shyamal Patel; Randie Black-Schaffer; Ross Zafonte; Paolo Bonato; Claire Meagher; Anne-Marie Hughes; Jane Burridge; Danilo Demarchi;
- 23. A Home-based Functional Hand-Extremity Assessment System for Stroke Rehabilitation**
Tri Vu; Hoan Tran; Feng Lin; Jeanne Langan; Lora Cavuoto; Wenyao Xu
- 24. Validation of Smart Insole for Gait Analysis**
Zhuolin Yang; Feng Lin; Wenyao Xu; Jeanne Langan; Lora Cavuoto; Zhinan Li; Qin Li

- 25. Gait-based Continuous Authentication using Multimodal Learning**
Ioannis Papavasileiou; Savanna Smith; Jinbo Bi; Song Han
- 26. Possibility of Gamified ICT Applications for Young Elderly**
Hyeongju Ryu; AhJung Byun; Hyeoiyun Lee; Yeonji Ko; Jeoungeun Kim; Jisan Lee
- 27. Method for Selection of the Best Application for Women's Health: Health Navi Ladies**
Hyeongju Ryu; AhJung Byun; Yeonji Ko; Jeoungeun Kim;
- 28. Internet of the Body and Cognitive Hypervisor**
Marc Taubenblatt; Bruno Michel; Keiji Matsumoto
- 29. Towards Learning Efficient Intervention Policies for Wearable Devices**
Matthew Saponaro, Haoran Wei, and Keith Decker
- 30. Characterizing and Calibrating Low-Cost Wearable Ozone Sensors in Dynamic Environments**
Dawei Fan, Jiaqi Gong, Benjamin Ghaemmaghami and Anyi Zhang (University of Virginia, USA); David Peden (University of North Carolina, USA); John Lach (University of Virginia, USA)

Day 3 (July 19, 2017)

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| Room | Grand Ballroom | | | | | | | | | | | | |
| 9:20-12:20 | <p>Session 3: (Session Chair: Fei Wang, Cornel Tech)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Finger Movement Recognition During Ballistic Movements Using Electromyography</td> <td style="width: 50%; padding: 5px;">Rong Zheng; Joey Legere; Martin von Mohrenschildt</td> </tr> <tr> <td style="padding: 5px;">Non-contact Human Computer Interaction System Design and Implementation</td> <td style="padding: 5px;">Li Liu; Shuo Niu; Scott McCrickard</td> </tr> <tr> <td style="padding: 5px;">Smartwatch Based Activity Recognition Using Active Learning</td> <td style="padding: 5px;">Farhad Shahmohammadi; Anahita Hosseini; Christine King; Majid Sarrafzadeh</td> </tr> <tr> <td style="padding: 5px;">Risk Factors Identification for Work-related Musculoskeletal Disorders with Wearable and Connected Gait Analytics System</td> <td style="padding: 5px;">Diliang Chen; Jia Chen; Haotian Jiang; Ming-Chun Huang</td> </tr> <tr> <td style="padding: 5px;">Empowering a Gait Feature-Rich Timed-Up-and-Go System for Complex Ecological Environments</td> <td style="padding: 5px;">Zhuolin Yang; Chen Song; Feng Lin; Jeanne Langan; Wenyao Xu</td> </tr> <tr> <td style="padding: 5px;">NCMB-Button: A Wearable Non-Contact System for Long-Term Multiple Biopotential Monitoring</td> <td style="padding: 5px;">Xian Li; Ye Sun</td> </tr> </table> | Finger Movement Recognition During Ballistic Movements Using Electromyography | Rong Zheng; Joey Legere; Martin von Mohrenschildt | Non-contact Human Computer Interaction System Design and Implementation | Li Liu; Shuo Niu; Scott McCrickard | Smartwatch Based Activity Recognition Using Active Learning | Farhad Shahmohammadi; Anahita Hosseini; Christine King; Majid Sarrafzadeh | Risk Factors Identification for Work-related Musculoskeletal Disorders with Wearable and Connected Gait Analytics System | Diliang Chen; Jia Chen; Haotian Jiang; Ming-Chun Huang | Empowering a Gait Feature-Rich Timed-Up-and-Go System for Complex Ecological Environments | Zhuolin Yang; Chen Song; Feng Lin; Jeanne Langan; Wenyao Xu | NCMB-Button: A Wearable Non-Contact System for Long-Term Multiple Biopotential Monitoring | Xian Li; Ye Sun |
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| 12:00-13:00 | Lunch (Outside Grand Ballroom) | | | | | | | | | | | | |

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|---------------|--|---|
| 13:00-14:30 | Panel: Internet of Things in Health and Medicine: Challenges and Opportunities Julian Goldman, John Lach, Marjorie Skubic, Jeffrey Rogers, Wendy Nilsen | |
| 14:30-14:50 | Coffee Break (1st Floor) | |
| Room | Grand Ballroom | |
| 14:50-17:50 | Session 4: (Session Chair: Jame Weimer, UPenn) | |
| | Non-contact home health monitoring based on low-cost high-performance accelerometers | Xiaoce Feng; Ming Dong; Phillip Levy; Yong Xu |
| | STREMS: A Smart Real-time Solution Toward Enhancing EMS Prehospital Quality | Xiaopei Wu; Robert Dunne; Zhifeng Yu; Weisong Shi |
| | CareNet: Building Regulation-compliant Home-based Healthcare Services with Software-defined Infrastructure | Peilong Li; Chen Xu; Yan Luo; Cao Yu; Jomol Mathew; Yunsheng Ma |
| | A Rhythm Analysis-Based Model to Predict Sedentary Behaviors | Qian He; Emmanuel Agu |
| | Gesture-enabled Remote Control for Healthcare | Hongyang Zhao; Shuangquan Wang; Gang Zhou; Daqing Zhang |
| | Reconfigurable Architecture of Neuro-physiological Sensors for Mobile Health System | Ruhi Mahajan; Babak Noroozi; Bashir I Morshed |
| Room | Grand Ballroom | |
| 17:50 – 18:10 | Closing session | |