

BigComp2016 - Schedule Overview

TIME	Track 1	Track 2	Track 3
Day1:	January 18 (Monday), 2016		
08:00 - 18:00	Registration		
08:30 - 09:30	Tutorial-1 (The Forum)	WS-2: WSTIE 2016 (Taipo Rooms I-II)	WS-3: Keynote Speech (Taipo Rooms III-IV)
09:30 - 10:30		WS-1: BigData4Healthcare (Taipo Rooms I-II)	WS-3: Exobrain (Taipo Rooms III-IV)
10:30 - 11:00 (CB)			
11:00 - 12:30			
12:30 - 14:00	Lunch (Bauhinia Room)		
14:00 - 15:00	Tutorial-2 (The Forum)	WS-1: Keynote Speech (Taipo Rooms I-II)	WS-3: Exobrain (Taipo Rooms III-IV)
15:00 - 16:00		WS-1: BigData4Healthcare (Taipo Rooms I-II)	
16:00 - 16:30 (CB)			
16:30 - 18:00			
18:00 - 18:30	Break		
18:30 - 20:00	Welcoming Reception (Bauhinia Room)		
Day2:	January 19 (Tuesday), 2016		
08:00 - 18:00	Registration		
08:30 - 10:10	Short Session-1 (oral) (The Forum)	Short Session-2 (oral) (Taipo Rooms I-II)	
10:10 - 10:40	Coffee Break		
10:40 - 11:00	Opening (The Forum)		
11:00 - 12:30	Keynote Speech-1 (The Forum)		
12:30 - 14:00	Lunch (Bauhinia Room)		
14:00 - 15:30	Poster Session-1 (The Forum)	Poster Session-2 (Taipo Rooms I-II)	Poster Session-3 (Taipo Rooms III-IV)
15:30 - 16:00	Coffee Break		
16:00 - 18:00	Regular Session-1 (oral) (The Forum)	Regular Session-2 (oral) (Taipo Rooms I-II)	Regular Session-3 (oral) (Taipo Rooms III-IV)
18:00 - 18:30	Break		
18:30 - 20:00	Banquet (Location to be announced)		
Day3:	January 20 (Wednesday), 2016		
08:00 - 18:00	Registration		
09:00 - 10:30	Keynote Speech-2 (The Forum)		
10:30 - 11:00	Coffee Break		
11:00 - 12:30	Regular Session-4 (oral) (The Forum)	Regular Session-5 (oral) (Taipo Rooms I-II)	Regular Session-6 (oral) (Taipo Rooms III-IV)
12:30 - 14:00	Lunch (Bauhinia Room)		
14:00 - 16:00	Regular Session-7 (oral) (The Forum)	Regular Session-8 (oral) (Taipo Rooms I-II)	Regular Session-9 (oral) (Taipo Rooms III-IV)
16:00 - 16:30	Coffee Break		
16:30 - 17:50	Panel Discussion (The Forum)		
17:50 - 18:00	Closing (The Forum)		

The 1st International Workshop on Big Data Analytics for Healthcare and Well-being (BigData4Healthcare 2016)

Workshop Organizers and Program Chairs

Youssef Iraqi, Khalifa University, UAE

Ho-Jin Choi, KAIST, Korea

Min Song, Yonsei University, Korea

Program Committee

Ae Ran Kim, Seoul National University, Korea

Ahsan H Khandoker, Khalifa University, UAE

Alex Rudniy, Fairleigh Dickinson University, United States

Amjad Gawanmeh, Khalifa University, UAE

Byeong-Soo Jeong, Kyung Hee University, Korea

Changseok Bae, Daejeon University, Korea

Hani Saleh, Khalifa University, UAE

Harish Bhaskar, Khalifa University, UAE

Hyeoun-Ae Park, Seoul National University, Korea

Kyuchang Kang, ETRI, Korea

Meenakshi Mishra, University of Kansas, United States

Nan Xiang, Chongqing University of Technology, China

Ying Ding, Indiana University, United States

Yong Wang, Chongqing University of Technology, China

Yong-Ik Yoon, SookMyung Women's University, Korea

Yuchae Jung, SookMyung Women's University, Korea

Zhu Lingyun, Chongqing University of Technology, China

Keynote Speech (14:00-15:00, January 18 (Mon), 2016)

Data Mining and Big Data Analytics in Biomedical Informatics Community

Hyeoun-Ae Park, Seoul National University, Korea

President of International Medical Informatics Association; College of Nursing & Systems Biomedical Informatics Research Center, Seoul National University, Korea

Abstract: International Medical Informatics Association (IMIA) is the world body for health and biomedical informatics. As an 'association of associations', IMIA plays a major global role in the application of information science and technology in the fields of healthcare and research in medical, health and bio-informatics. IMIA pursues its scientific activity in specific fields of the wider domain of health and biomedical informatics through Working Groups and Special Interest Groups (WG and SIG). One of IMIA's 26 WGs called Data Mining and Big Data Analytics focuses its activities on specific topics of interest for biomedical community, in particular, the exploitation of predictive data mining in clinical medicine; knowledge-based functional genomics; intelligent data analysis of molecular phenotypes; data mining models for the assessment of clinical risk; temporal data mining in medicine and bioinformatics; and evolutionary computation in biomedical knowledge discovery. In my talk, after introducing IMIA and its main activities, I will present use cases of successful intelligent data analysis and data mining implementations in healthcare with research activities in this field.

Bio: Hyeoun-Ae Park is the President of International Medical Informatics Association (IMIA). She is also a professor of College of Nursing at Seoul National University (SNU) teaching Nursing and Medical Informatics at SNU. Prior to joining SNU in 1992, she was a research fellow at Korean Institute of Health and Social Affairs. Dr. Park received her BS in Nursing from SNU, her MS and PhD in Biostatistics and Health Informatics from the University of Minnesota. She had been a visiting scholar at health informatics department at the University of Minnesota, and SNOMED CT International at the College of American Pathologists. Her areas of research are healthcare vocabulary and terminology, especially around ICNP and SNOMED CT. Her recent research focuses on ontology as a framework for social big data, and data mining and big data analytics in healthcare. She served as a vice president of the IMIA in charge of Working Groups and Special Interest Groups for over 6 years from 2007 to 2013. She also served as the chair of NI Special Interest Group of the IMIA from 2012 to 2015. She received 2004 Distinguished Leadership Award for Internationals and School of Nursing 100 Distinguished Alumni Award in 2008 from University of Minnesota. She is a Fellow of American Academy of Nursing. She received Lael Cranmer Gatewood Distinguished Lectureship Award for her leadership in Health Informatics at the 50th anniversary of Health Informatics Program at University of Minnesota.

Program

11:00-12:30, January 18 (Monday), 2016

Session WS1-1: Experiential Knowledge Platform for Medical Applications (Chair: Mun Y. Yi, KAIST, Korea)

Introducing Experiential Knowledge Platform: A Smart Decision Supporter for Field Experts

Keejun Han, Eunkyung G. Lee, Hyunwoo Je, and Mun Y. Yi (KAIST)

Constructing an Initial Knowledge Base for Medical Domain Expert System using Induct RDR

Jonghwan Hyeon, Kyo-Joong Oh, Youjin Kim (KAIST), Hyunsuk Chung, Byeong Ho Kang (UTAS), and Ho-Jin Choi (KAIST)

A Hybrid Method for Retrieving Medical Documents with Query Expansion

Jiyeon Choi, Youkyoung Park, and Mun Yi (KAIST)

Analyzing Emotions in Twitter During a Crisis: A Case Study of the 2015 Middle East Respiratory Syndrome Outbreak in Korea

Hyo Jin Do, Chae-Gyun Lim, You Jin Kim, and Ho-Jin Choi (KAIST)

14:00-15:00, January 18 (Monday), 2016

Keynote Speech (Chair: Ho-Jin Choi, KAIST, Korea)

Data Mining and Big Data Analytics in Biomedical Informatics Community

Hyeoun-Ae Park (Seoul National University; President of International Medical Informatics Association)

15:00-16:00, January 18 (Monday), 2016

Session WS1-2: Human Body Posture, Motion and Behavior Recognition (Chair: Sungzoon Cho, Seoul National University, Korea)

Pet Buddy: A Wearable-based Canine Behavior Recognition Device using Single IMU

Juneyoung Ahn, Jini Kwon, Hyejeong Nam, Jee-In Kim, and Hyun-Kook Jang (Konkuk University)

Human Body Posture Recognition With Discrete Cosine Transform

Hyungook Kang, and Sanghyun Lee (KAIST)

Hand Motion Identification of Grasp-and-Lift task from Electroencephalography Recordings using Recurrent Neural Networks

Jinwon An, and Sungzoon Cho (Seoul National University)

16:30-18:00, January 18 (Monday), 2016

**Session WS1-3: Big Sensor Data Techniques for Healthcare and Well-Being
(Chair: Yong Ik Yoon, Sookmyung Women's University, Korea)**

Smart Belt : A wearable device for managing abdominal obesity

Hyejeong Nam, Jin-Hyun Kim, and Jee-In Kim (Konkuk University)

Monitoring Senior Wellness Status using Multimodal Biosensors

Yuchae Jung, and Yong Ik Yoon (Sookmyung Women's University)

A Data Acquisition Architecture for Healthcare Services in Mobile Sensor Networks

Chanhee Lee, Taehun Kim, and Soon J. Hyun (KAIST)