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Present

On Behavioral Insights of Wearables for Coaching Advises

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November 11, 2016, Friday, Time: 6:00 to 8:00 PM

at Long Island University, Brooklyn Campus, New York, (Seminar Room: HS119)

Abstract:

Mitigating some globally emerging health problems such as obesity needs scalable solutions that can promote healthier lifestyles outside of clinical settings. Such scalable solutions, while targeting general population, need to automatically provide personalized behavior change suggestions that fit an individual's preferences and needs. There has been fast-growing development of sensor devices and health applications for continuous monitoring of human behavior (such as physical activity and food intake) and health status such as weight and heart rate variability. However, there are considerable challenges to translate these noisy and dynamic population behavioral data into crowd-source coaching insights for personalized planning. The data challenges come from the consumer device grade missing values and outliers in data, which result in modeling and computational difficulties and possible machine learning bias due to distortion of the data distribution. Even with a precise dynamic behavior model for an individual, there are considerable context challenges regarding how to identify the optimal planning solutions that are not only supported by the dynamic model, but also fit individual's preferences and human behavior's personal context. Results from exploring sample data encourage us to pursue better and more personalized guidelines to help shape the population's behavioral patterns towards healthier lifestyles.



Keynote Speaker Bio: Dr. Hung-yang (Henry) Chang is a Senior Technical Staff Member with Center of Computational Healthcare, IBM Thomas J. Watson Research Center. He currently leads the cognitive health coach research area using bio-metric wearables with collaboration of IBM Watson Health client. He received his Ph.D. degree in Computer Sciences from the UW-Madison. He has worked on parallel operating systems, Mobile file systems, and Websphere business process monitoring suits. He leads the intelligent living research collaboratory 2010-2013, conducting pilot studies on cloud enabled personalized healthcare wellness ecosystem for chronic disease management with community hospitals.

Location:

Long Island University, Brooklyn Campus, New York, Room HS 119
1 University Plaza, Brooklyn, NY 11201-5372

Directions: <http://www.liu.edu/Brooklyn/About/Visit/Directions.aspx>

All are invited * All are invited * All are invited