Preface

How can we quantify our health? How can our health data be integrated into personalized medicine, improved wellness, and contributions to scientific discovery? These are the significant questions to improve our daily life. To tackle this issue, our symposium aims to explore the answers to the above questions by integrating two approaches, individual and collective viewpoints, in improving personal wellness. The approach from the individual viewpoint focuses on recently developed self-tracking technologies for monitoring personal health conditions such as sleep, diet, exercise, and vital signs data, and for analyzing personal medical data and personal genome data. The approach from the collective viewpoint focuses on collective intelligence as a potential resource for finding useful knowledge for personal wellness from the knowledge of other individuals and groups. The role of artificial intelligence and other technologies is examined in helping to create value in our future personal wellness. This symposium will bring together an interdisciplinary group of researchers to discuss possible solutions for personal wellness.

The scopes of our interests include, but are not limited to the following:

Self-tracking for personal wellness. (Sleep monitoring, diet monitoring, vital data monitoring, personal medicine, personal genome, new types of self-tracking devices, portable mobile tools.)

Collective intelligence for personal wellness. (Data mining for scientific discovery on collective data, biomedical informatics and systems biology, data visualization.

Field study for personal wellness. (Life log analyses such as vital data analyses, lifestyle related disease improvement experiment such as metabolic syndrome or diabetes, sleep improvement experiment.)

Application for personal wellness. (Life log applications, wellness service application, medical recommendation system, care support system for aged persons, web service for personal wellness, games for health and happiness.)

Community platform for personal wellness. (Citizen science platform, do it yourself (DIY) trials, quantified self business model.)

By examining these issues, the symposium is expected to present important interdisciplinary challenges for guiding future advances in AI community.

– Takashi Kido and Keiki Takadama