



Proposal Defense
Doctor of Philosophy in Computer Science

“Understanding and designing an integrated personalized fitness-tracking system for mundane users” by Nannan Wen

Date: November 30, 2020

Time: 1:00pm – 3:00pm

Place: https://pitt.co1.qualtrics.com/jfe/form/SV_eLjcAqF5ybTx97n

Committee:

- Dr. Shi-Kuo Chang, Department of Computer Science, School of Computing and Information
- Dr. Youtao Zhang, Department of Computer Science, School of Computing and Information
- Dr. Erin Walker, Department of Computer Science, School of Computing and Information
- Dr. Jacob Biehl, Department of Information Culture and Data Stewardship, School of Computing and Information
- Dmitry Babichenko, Department of Informatics and Networked Systems, School of Computing and Information

Abstract:

Due to the thrive of Internet and IoT technologies, personalized self-tracking systems for fitness are experiencing rapid growth. Despite the great convenience, new challenges are brought, questions like what is the need for users? Can the tools today fit the need of their daily routines? Our research focus on identifying barriers that preventing the long-term adoption of such a fitness tracking system into their daily lives and propose possible solutions to help mediate it. We interviewed people who has little or zero prior knowledge of personalized self-tracking systems in their daily routine, identifying specific obstacles that they encounter during their daily practice. We propose a framework for a highly integrated and automatic fitness-tracking system, we then implemented a new system under the discipline proposed. We then propose a 2-week long user study for mundane users who has little or zero experience with the system to validate the requirement we identified.