# **Human-Engaged Computing**

#### **Project Leader**

REN Xiangshi, Dr. Eng.
Professor, Information Systems Engineering
Director and Professor, Center for Human-Engaged Computing

#### **Faculty Members Involved in this Project**

SILPASUWANCHAI Chaklam, Dr. Eng. Research Associate, Center for Human-Engaged Computing

John Cahill

Visiting Researcher, Center for Human-Engaged Computing

PARK Kaechang, D.M.

Visiting Professor, Research Organization for Regional Alliances

### 1. Objective

## This project is aimed at:

Conducting *Human-Engaged Computing* (HEC) research. HEC is a new research area concerning synergized interaction between humans and technologies and seeks to leverage full capacities of both humans and technologies for the well-being of the global society. This project will carry out studies to design and develop interactive systems that promote full engagement, well-being, behavioral change and that support HCI researchers to innovate with progressive widening global awareness and relevance to considered human priorities.

#### Related article/paper/info:

- 1. Xiangshi Ren. 2016. Rethinking the Relationship between Humans and Computers. *Computer*, 49(8), 104-108. IEEE.
- 2. Umer Farooq, Jonathan Grudin, Ben Shneiderman, Pattie, and Xiangshi Ren. 2017. Human Computer Integration versus Powerful Tools. *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. 1277-1282. ACM.
- 3. International Workshop on Human-Engaged Computing. <a href="http://forum.chec.ren/">http://forum.chec.ren/</a>. Last accessed on December 14, 2017.
- 4. Kavous Salehzadeh Niksirat, Sayan Sarcar, Huatong Sun, Effie Lai-Chong Law, Torkil Clemmensen, Jeffrey Bardzell, Antti Oulasvirta, Chaklam Silpasuwanchai, Ann Light, Xiangshi Ren. 2018. Approaching Engagement towards Human-Engaged Computing. Proceedings of the 2018 CHI Conference Extended Abstracts on Human Factors in Computing Systems. ACM.
- 5. Effie Lai-Chong Law, Chaklam Silpasuwanchai, Xiangshi Ren, Jeffrey Bardzell, Torkil Clemmensen, and Yan Liu. 2015. Leveraging and Integrating Eastern and Western Insights for Human Engagement Studies in HCI. *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems*. 2433-2436. ACM.

#### 2. Project Outline

#### To that end, the project will consist of the following phases:

- (a) Undertake systematic literature reviews
- (b) Design and develop interactive systems
- (c) Conduct formal HCI evaluations
- (d) Establish frameworks and guidelines
- (e) Communicate findings, guidelines and encouraging perspectives to HCI practitioners

#### 3. Expected Performance

#### In this project, the successful candidate would be expected to:

- (a) Publish at least 2 research papers in top-tier HCI conferences (ACM CHI, ACM UIST) & journals (ToCHI, HCI)
- (b) Assist the lab supervisor in research and management
- (c) Assist in the supervision of Masters & Bachelor students
- (d) Report project progress in meetings and update progress to the laboratory's website

## 4. Required Skills and Knowledge

### The successful candidate for this project will have the following knowledge and skills:

- (a) Strong background in HCI, Computer Science, Design, Psychology or Neuroscience
- (b) Strong software development skills
- (c) Strong communication ability and interpersonal skills
- (d) Strong verbal and written English skills
- (e) Ability to meet tight work deadlines
- (f) Ability to work independently as well as in an international team

#### See our lab website:

http://xrenlab.com/

http://xiangshiren.com/

http://forum.chec.ren/

See our admission guidelines:

https://www.kochi-tech.ac.jp/english/admission/ssp aft19oct/ssp application guideline.html

#### Contact

E-mail: ren.xiangshi@kochi-tech.ac.jp