

## Introduction to Human-Centered Computing (HCC) Spring 2015

**Place:** Room 107, New Building, IIS, AS **Time:** 14:00-17:00 Thurs

**Chair:** Prof. Hao-Chuan Wang 清大 王浩全 (Co-Chair: Prof. Neng-Hao Yu 政大 余能豪)

**Outline:** The course aims to provide graduate students of the TIGP program of Social Network and Human-Centered Computing (SNHCC) an overview of human-centered computing (HCC), particularly from the view of user-oriented computing system design and research. As an emerging, multidisciplinary field, HCC is commonly referred to and characterized by the idea of devising designs of computing systems based on properties, needs and constraints of the users and their tasks, rather than the inverse. Thus HCC embodies more than technology building, such as how to the software and hardware systems for supporting people. It also includes systematic understanding of people and the interactions between people and technologies. In this course, we'll explain and illustrate the state of the art of human-centered computing, focusing on fundamental concepts and practices of interface/interaction design and engineering, methods for studying users/tasks, methods for design-prototyping, and key topics that are closely related to the TIGP program, such as human computation, social computing, mobile computing, and tangible interaction etc.

**Reference:** Yvonne Rogers, Helen Sharp, Jenny Preece. *Interaction Design: Beyond Human-Computer Interaction*. 3<sup>rd</sup> Ed. 2011 (the "ID book")

**Office hours:** by appointment

**Grades (subject to change):** Assignments 30%, Midterm exam 30%. Final exam 40%

	Date	Topics/Brief Description	Lecturers
1	2015/02/26	Overview (ID book chap 1)	Hao-Chuan (NTHU) Jones Yu (NCCU)
2	2015/03/05	Understanding and Conceptualizing Interaction (ID book chap 2)	Hao-Chuan
3	2015/03/12	Cognitive Aspects (ID book chap 3)	Hao-Chuan
4	2015/03/19	User Interfaces: Usability and Usefulness (ID book chap 6)	Hao-Chuan
5	2015/03/26	Design Methods and Processes (ID book chap 9, 10)	Jones
6	2015/04/02	Tangible and Physical Interaction	Jones
7	2015/04/09	Social Aspects (ID book chap 4)	Hao-Chuan
8	2015/04/16	Human Computation and Crowdsourcing I	Hao-Chuan
9	2015/04/23	Midterm Exam	
10	2015/04/30	Evaluation (ID book chap 12,13,14)	
11	2015/05/07	Mobile Interaction	Jones
12	2015/05/14	Prototyping	Jones Hsien-Hui Tang
13	2015/05/21	Class Rescheduled	
14	2015/05/28	Designing Technologies for Non-native Speakers in Multilingual Teams	Hao-Chuan Naomi Yamashita
15	2015/06/04	Social and Affective Computing	Hao-Chuan
16	2015/06/11	Wearable Computing	Jones
17	2015/06/18	Human Computation and Crowdsourcing II	Sheng-Wei Chen
18	2015/06/25	Final (project presentation and report submission)	