It Is Not Too Late: Developing HCI Education in Asia

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Abstract

Based on one authors' experience on HCI education and research, this paper introduces HCI education in China, and describes a HCI education workshop for Asian countries.

Author Keywords

HCI education; curriculum

ACM Classification Keywords

K.3.0. Computers in Education

Introduction

In this position paper, we introduce (1) one authors' education and research experience in the HCI domain, (2) HCI education in China, and (3) our goal for organizing an HCI education workshop to help China develop HCI major and curricula.

Education & Research Experience

Dr. Cheng majored in industrial design, and received his Bachelors degree ten years ago, in 2004, when there were few Chinese people aware of HCI, usability or user experience. Then he became a PhD candidate majoring in computer science in Zhejiang University, which is a top-3 university in China. From then on, more and more teachers and students around him began talking about HCI. Zhejiang University has an

industrial design institute in its School of computer science. So there is chance to conduct interdisciplinary education and research, in areas such as HCI. However, there are still no HCI-related courses, so he had to instead take courses in computer science and design, such as computer graphics, multimedia, digit art and design, and ergonomics. In 2007, he did a three-month internship in Microsoft Research Asia (MSRA). It was his first time to conduct HCI-related research: one A/B test for UI usability evaluation. He also first heard about SIGCHI and the CHI conference there.

When he received his PhD degree, he had the chance to become a post-doctoral fellow at the Human-Computer Interaction Institute (HCII) at Carnegie Mellon University. At the HCII, he experienced formal and systematic HCI research training, for example, on how to write an IRB protocol and recruit participants. Actually, there are not even IRB requirements and formal participant recruitment processes that exist in China currently. He also learned about how to setup an HCI research environment, like the HCII, with three domains coming together, computer science, social and design. This has provided him with much inspiration to create innovative products and service.

HCI Education in China
The complexity of HCI requires inter-, trans- and multidisciplinary approaches, released in new educational programs (HCI Master) [2]. Researchers have identified 10 to 15 master's programs or specializations featuring HCI, mainly in universities in China's major cities [1]. Most of them are based in computer science, mostly focused on HCI technologies. Some of them are based in psychology majors, and the others are based in art design or industrial design.

There are also few HCI-related education programs that cross departments, *e.g.*, X-Studio organized by the School of fine art and School of computer science at Tsinghua University. However, an independent and formal curriculum with a clear focus on UX and interaction design is only available at the Sino-European Usability Center at Dalian Maritime University. They offer two degree programs: a master's degree and a doctoral degree in usability engineering and HCI design. These programs were supported by the Sino European Systems Usability Network, a collaboration program co-sponsored by the EU FP5 Program, EU Asia-IT&C Program and the China-EU S&T Cooperation Program of China government.

Although most Chinese universities still lack a formal HCI curriculum, there seem to be plenty of jobs in the Internet, banking and mobile phone industries that require HCI expertise now. So, more and more Chinese universities began to establish HCI programs. For example, the HCI masters program at Dalian Maritime University offer a one-year curriculum devoted to regular computer science, such as software engineering, computer networks, artificial intelligence, databases, and statistics; the other year and a half is devoted to typical HCI courses, such as usability engineering, and students get a variety of practical training, including application of usability measures, observations in a usability lab [1].

HCI Education Workshop
Faced with these situations, China and other Asian countries need benefit from guidance on how to develop their own HCI education. In this context, ACM CHI2015 conference will be held in Seoul, Korea. In order to help the local communities and SIGCHI

communities to be better prepared and involved in this upcoming event, SIGCHI is launching *Campaign in Asia* for CHI2015. We have coordinated with the HCII at CMU and the China Computer Federation Task Force on Human Computer Interaction (CCF HCI) to organize a workshop for Asian HCI educators, and help them to learn: what is the core body of knowledge for HCI; how HCI curricula could be offered to students; useful ways to teach students from different disciplines etc.

We will invite some outstanding HCI experts from North America, Europe and Asia, to share their experiences in teaching HCI theory and practice in universities and other communities. We hope this can facilitate HCI education in Asia, and help Asian universities supply their students with many more opportunities for high quality HCI-related education programs in the near future. During this workshop, we will introduce a framework of HCI knowledge, master and PhD program

in HCI, HCI education in Asian countries, curriculum or teaching case study and hold some panels to discuss open questions. The outcome of this workshop will be brought to a broader audience, such as distributing curricula, course resources and speakers' videos on open source websites.

We plan to extend this workshop to another workshop for Asia-Pacific HCI education in Seoul at CHI2015. We also would like to help other Asian countries to organize similar workshops in the future.

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