**Research Interests**

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"First we build the tools, then they build us" said Marshall McLuhan, the philosopher from University of Toronto. Although his rhetorical words were too difficult to understand, I felt deep empathy for his some words explaining nowadays new media. The above one is a notable example which influenced my way of thinking. Numerous novel devices which come up every day show our endless desire for better tools. They has allowed more powerful and extended tools since WYSIWYG to Jinha Lee’s WYCIWYW. Although some of early HCI research might look cumbersome and hinder our thoughts, through the ceaseless efforts of researchers, it is expanding its area than ever and bringing better tools to our daily life. As a computer scientist, isn’t it natural for me to embark this heart-throbbing progress? I would like to participate to make the world better and make people happy rather than sitting back and watching how it is being advance.

After my master’s thesis on evolving a keyboard interface, I could develop 석사 때 연구 소개, 어떻게 도움이 되었다. 이후 삼성에서 한 것은 어떻게 도움이 되었다. 이런 경험은 내가 박사 연구를 결심하게 된 원동력이 되었다. (기술 기반의 혁신) 나는 사람의 행동을 관찰하고, 컴퓨터 인터페이스를 사람에 더욱 가깝게 만들고 싶었다. 그래서 현재 Fabric 기반의 인터페이스를 연구하고 있다. 하드웨어 지식과 이미지 프로세싱 기법을 이용하여 만들고 있으며, 스마트홈, 웨어러블 디바이스 등 다양한 어플리케이션을 고안하고 있다.

구글 글라스와 같이 비전기반의 많은 디바이스들이 나오는 만큼, 나는 결국 사람 눈의 역할과 같은 비전이 많은 문제를 해결해 줄 것이라 믿는다. 이러한 관점에서, 나는 ~~한 연구를 하고 있는 ~~연구실의 멤버가 되어 더 많은 연구를 하고 싶다.

+ 메일에 쓴 3가지 포인트에 대해 쓸 것

UX designing in Samsung,

To enhance our daily life, I focused on keyboard which is we are used to and had relatively less development in research. Keyboard might be perfect to input characters, one of the human’s greatest invention. However, we are experiencing the discomfort moving hand forward to the mouse and backward to the keyboard, since GUI era. keyboard was the basic interface, lots of software provides cords which can be replaced by some clicks so that users can select either interface for some functions. Nevertheless, ordinary computer users experience difficulties with remembering cords, and they choose to use mouse, which cause physical and mental distraction. To solve this problem, I suggested IR-sensor based keyboard interface which enabled users to use several gestures instead of cords or mouse clicks. One similar research was demonstrated by MS Research in CHI 2014, but I optimized and implemented gestures in my master’s thesis in 2011.

Current

These experience made me more confident at Samsung DMC UX Center. In my notable project, Smart Home, I could conducts a research for worldwide users and learned to get insights from it. Moreover, I had a chance to make synergy between Samsung’s many devices which is more focused by Professor Daniel Wigdor. In addition, Dynamic Graphics Project provides an ideal climate for me to develop my cross-disciplinary interests.

From these perspectives, I believe that I am ready for PhD program in DGP lab in University of Toronto. I hope fruitful discussions and advanced technologies at DGP would foster my research in HCI.