

Candy R. Wei Prize for International Studies in Art and Design

I studied Human-Computer Interaction (HCI) at Uppsala University in Uppsala, Sweden to expand my knowledge of Scandinavian design and my practice as an interaction designer. Through an HCI course called *Embodied Interaction*, I was exposed to phenomenology theory—the study of consciousness and experience. For the first time as a designer, I applied philosophical discussion to research—in the form of field studies, bodystorming, etc. My class was taught to observe and simulate experiences before designing artifacts to facilitate them.

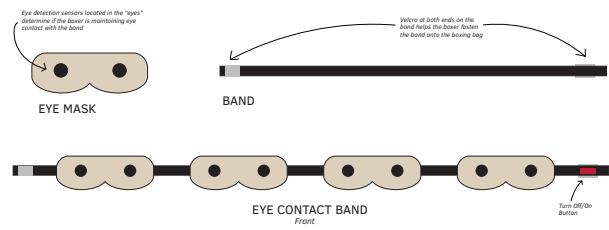
For our final project, my group wanted to simulate the experience of boxing with a partner for individually practicing boxers. Before designing, we visited a local boxing club to document the boxers' techniques and understand the social dynamic among boxers. Additionally, my group tried boxing ourselves—against each other and with a punching bag. Based upon our research, we deduced that the crucial factor missing in individual boxing was the opponent's visual and physical feedback. These findings were instrumental in informing our design decisions for the final artifact.

I carried over the research methodologies from *Embodied Interaction* to my current design practice. I'm currently a part of the Co-located, Collaborative VR research group at the School of Information and I'm analyzing how VR hardware can facilitate a greater sense of togetherness among co-located users. Thus far, I've conducted user studies to understand how being physically connected influences how co-located users experience the VR application together. Based upon the user interaction within the study, I've started developing low-fidelity prototypes.

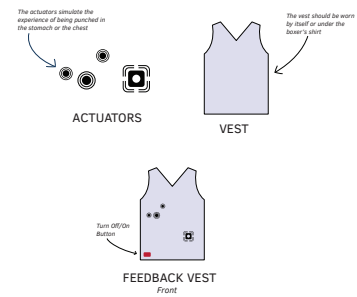
From my study at Uppsala University, my definition of design expanded to include research outcomes as design artifacts in themselves—such as early prototypes, user studies, etc. I hope to continue a research led design practice that fully understands users before designing for them.

Eye Contact Band and Feedback Vest

EYE CONTACT BAND



FEEDBACK VEST

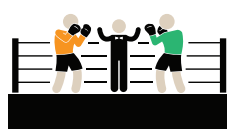


SCENARIO

Eye contact is a critical element of pair boxing; boxers are able to develop a keen understanding of each other mentally and physically.



Consciously controlling one's eye contact allows a boxer to have an edge over their opponent and can ultimately lead to winning a boxing match.



Our group artifact integrates eye contact into individual boxing. The band measures the boxer's eye contact and the vest provides appropriate feedback.



The actuators on the vest will clench the boxer and create the sensation of being punched as a response to unwavering or inconsistent eye contact.



Concept Sketch for design artifacts and scenario



Initial Prototype of Eye Contact Band

Co-located, Collaborative Virtual Reality



Study in understanding the implications of physical connection for co-located VR users



Low-fidelity prototype of a connected VR headset concept