This summer, I took a full-time internship with Siemens Corporate Research, technology. Siemens Corporate Research is comprised of more than 300 of the world’s most talented scientists, engineers and technical experts from over dozen countries. During two-month internship, I supported two projects and worked on 4 projects with full time responsibilities. All projects are supported by the American government and used by universities and organizations worldwide. During my internship, I mainly designed computing products for building technology that are future solutions for approaching energy consumption. Each project challenged my assumption of current building technology paradigms by integrating information and technology into them. Aside from the projects, I gave a presentation of my previous projects at Siemens and successfully organized a design talk among designers, engineers, business leaders, and researchers. Each weekend, I traveled to explore the east coast for design and art events. I went to Philadelphia, Boston, New York and Princeton for all kinds of exhibitions, from city level to university level.

Siemens

I was also very lucky to have Dr. Zheng as my supervisor at Siemens. Dr. Zheng’s research on experience design and aesthetic is done in a scientific way. The first featured project I worked on is a system that enables occupants in the building to consume energy sustainably with their comfortability as a priority. On this project, occupants are not just occupants, but they can direct the energy performance of the building through collaborative controls of their comfortability, and how those controls respond to our mood and behavior in a sustainable environment. I learned that the social, psychological, behavioral issues behind our human nature are far more important than rashly producing a design solution. Within my understanding of the complexity model, we can provide design value of social and cultural duration. More importantly, it is a potential approach for the traditional big
players in industry to put occupants into an eco-system of sustainable building. It breaks the
assumption that we can only achieve sustainable environment only by technological efforts. We
also can achieve the goal by designing.

Design also helps us to see the value of technology. For another project, I tested on how design
metaphors can shorten user’s learning curve and encourage them to explore more. I tested and
played with information’s metaphorical qualities, and aimed to create an evidence based of shape,
texture, and luminance through information. My approach to information is as artistic material
that can describe the quality of the technology. This project is for facility managers at American
military bases to manage assets in and among buildings. It also offers me a change, an
opportunity to internalize my understanding of the complexities, also beauties created by
technology.

I also had some research experiments with Dr. Zheng on the computer and eye interaction in the
future. As our understanding of products is redefined by technology, products will become
more discreet. However, the social, cultural and ethical issues will appear greater, the value of
design will moved from supporting functions to engage human experience. For example, I
sketched out ideas that users can type with their eyes on the screen, and how a user confirms on
the task with computer screen without using hands at all. If we change computer screens into
glasses, how we design the relationship between technology, behavior and its influence on a
personal and public level. All discussions at Siemens will help me to reflect on my own studio
work.

Letter from Mr. Stephen Hawking in the regards of eye and computer products
Supported by SCR

New York, Philadelphia, Boston and Princeton

For the rest of my time, I traveled along east coast to art and design museum. I took three trips
to New York, two trips to Philadelphia and one trip to Boston. In Philadelphia, I enjoyed seeing
Cezanne, Gauguin’s imagination of Acadia. I am amazed by how they created versions of Acadia
by getting reference from poems to influence their creative sense. In New York, while visiting
MOMA’s exhibited “Game Plan” by Alighiero Boetti, I also visited the Metropolitan Museum’s
furniture show. I was amazed by how designers got their design inspiration from art. As
illustrations showed below, you can see how the composition influences design.
It makes rethink on my internship and my studio work. When I design with technology, are we missing the beauty of art? Can we still keep the cultural and historical reference in the information age? What should we keep when we reference art within technology? What is the material expression in technology? How time sever as dimension for design and art value? Why should we keep poetic sense in human experience with technology? Or can we represent what we are missing in this age.
In Boston, I encountered with an answer. In the ICA museum, artist McElheny is presenting his understanding of metaphysical quality to domestic vessels. In his exploration, he asked how much symbolic weight everyday objects could bear. His Halo after Botticelli emulates the work of Italian master, lending material presence to an article of faith. I am impressed by how McElheny’s philosophy of rendering halo to concretize psychic investment in material things. For him, “faith is a form of persistent desire. And glass represented and continues to represent that ineffable quality.”


In Princeton, the Princeton Art Museum presents conversations on “Encounter, Conflict, Dialogue, and Discovery”. Assembled in this exhibition are artistic encounters that draw from the arts of Africa, Asia, the Americas, and Europe, spanning time from ancient to contemporary art. There are four core parts of Encounter in art.

“Exchange, to give or lose something while receiving something else in return. Rupture, to burst open-treaty, nation, body, or belief. Perceive, to observe with the mind or senses, or to interpret something in a particular way. Translate, to convey from one person or place to another; to express ideas in different words. Essentialize, to express the nature of, believing that a culture’s essence can be described. Instead of disparate temporal and geographic realms, function, style, materials, or theme in order to question and provoke ideas between various peoples and their disclosures are much more important for this show.”

A recent visit to the newly opened Zodiac show on Princeton campus brought all my summer experience to an end. Seeing how Ai weiwei identifies and investigates the culture that produces it and examines it in the relation to other cultures and other histories.
It embodies our ideas and sensibilities. In this trip, I experienced the beauty of art, design and life. I feel every time, when I am finishing this trip, it is just a new beginning of a new trip, and this is just like design. This trip teaches me to observe carefully, describes precisely, understand problem thoroughly, and embrace challenges with courage.
I want to end with one of my favorites quotation.

"Design creates culture. Culture shapes values. Values determine the future." –Robert L. Peters
According to Cui Fei, the artist “took inspiration from Chinese characters to explore the relationship between nature and culture.” Seeing Chinese characters as ideograms (symbols that express ideas rather than specific words) originating in nature, she arranged phototransfers of grape tendrils in columns in the form of a Chinese calligraphic composition.

Family Tree, a poetic way to interpret information