Design Concept

The given site is a new extension of Silicon Valley, leading the way in cutting-edge science, and is also located close to the upcoming new Google building. And in terms of transportation, the site is close to the airport and railway station, making it easy for visitors to access. Based on the background, it was the starting point of bringing ‘quantum theory’ as the most controversial theory in modern science to this site, and at the same time creating an architectural space and landmark that is open to everyone.

First of all, if we think about the ‘quantum theory’, the features are that nothing is defined, and interactive reaction is happening depending on people’s observation or consciousness. While thinking about how to metaphorically re-translate this into architectural way, I came up with an architecture that constantly changes through visitors’ experience and other factors. The change is always influenced by the forces of everyday nature as well as the actions of people who use the space. To do this, the space had to have a flexible material. So, with using very thin fabric, enveloped space and form are created. It is constantly changing in shape by the external climate and the mechanical & electrical technology interacting with people's movements. Here, visitors will be able to experience the ever-changing ‘Serendipitous Scene’ through their observations and movements.

Space Program

The site as a public space serves a new cultural shelter in Silicon Valley by arranging public cultural facilities with the main event space as the central area. Specifically, the facilities are various playground facilities, exhibition space, cafe, small stage, etc. Here, various events needed for the surrounding community will be happening.

Interactive technology

When visitors begin to make movements on the main floor panels of the ground, the sensors on the floor transmit electrical signals to the pins and motors connected to the fabric via wires through the free directional beam. This signals cause the pins to move up and down by operation of motors. As a result, the fabrics gain dynamic movements depending on the locations of the sensor that visitors step and the amount of stepping strength.

Geothermal Heat Pump & Self Electricity Generator System

To achieve ‘Net Zero Energy Design’, all the electricity that is used for the lighting & interactive pin movement can be covered with this system.