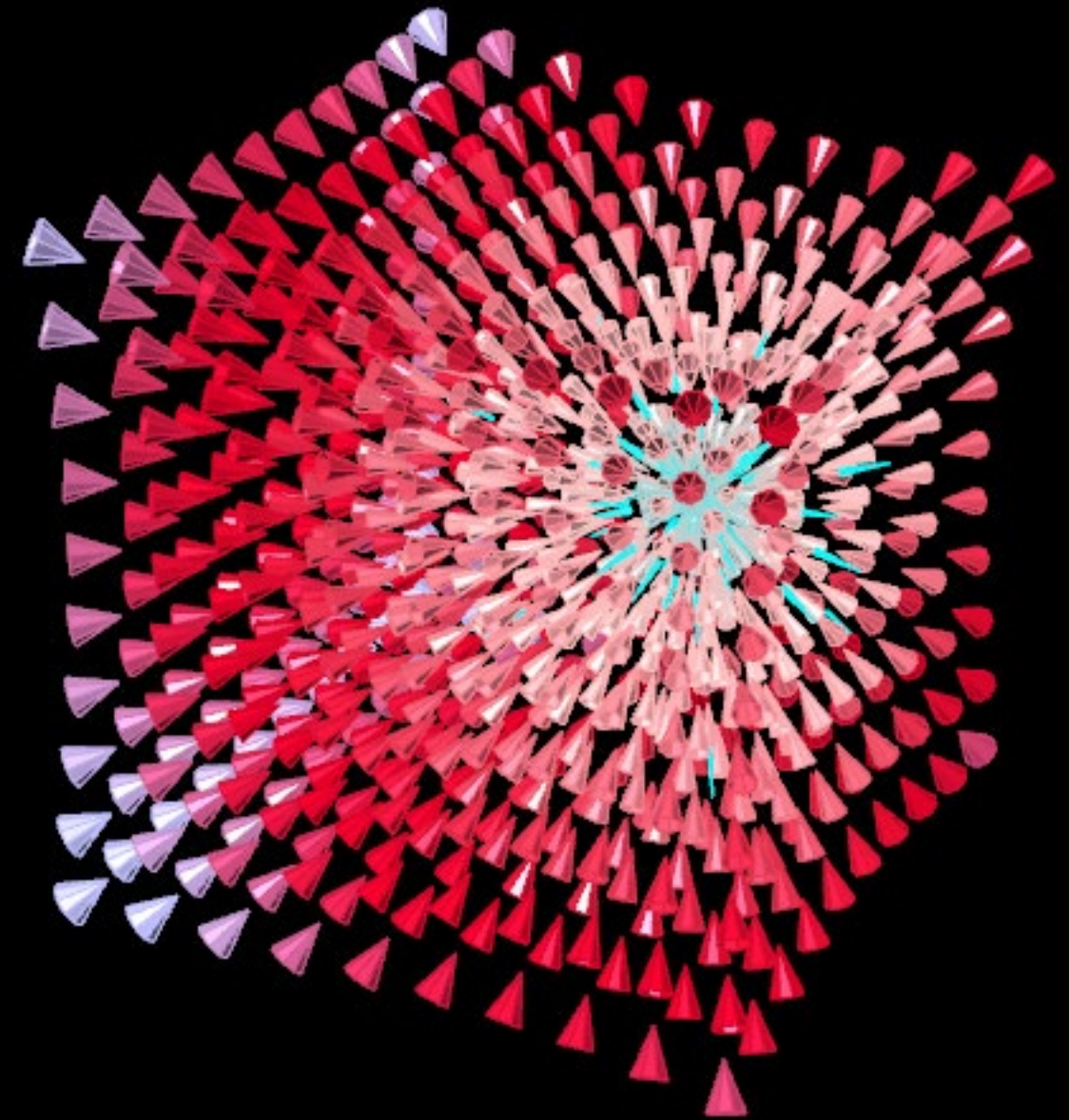
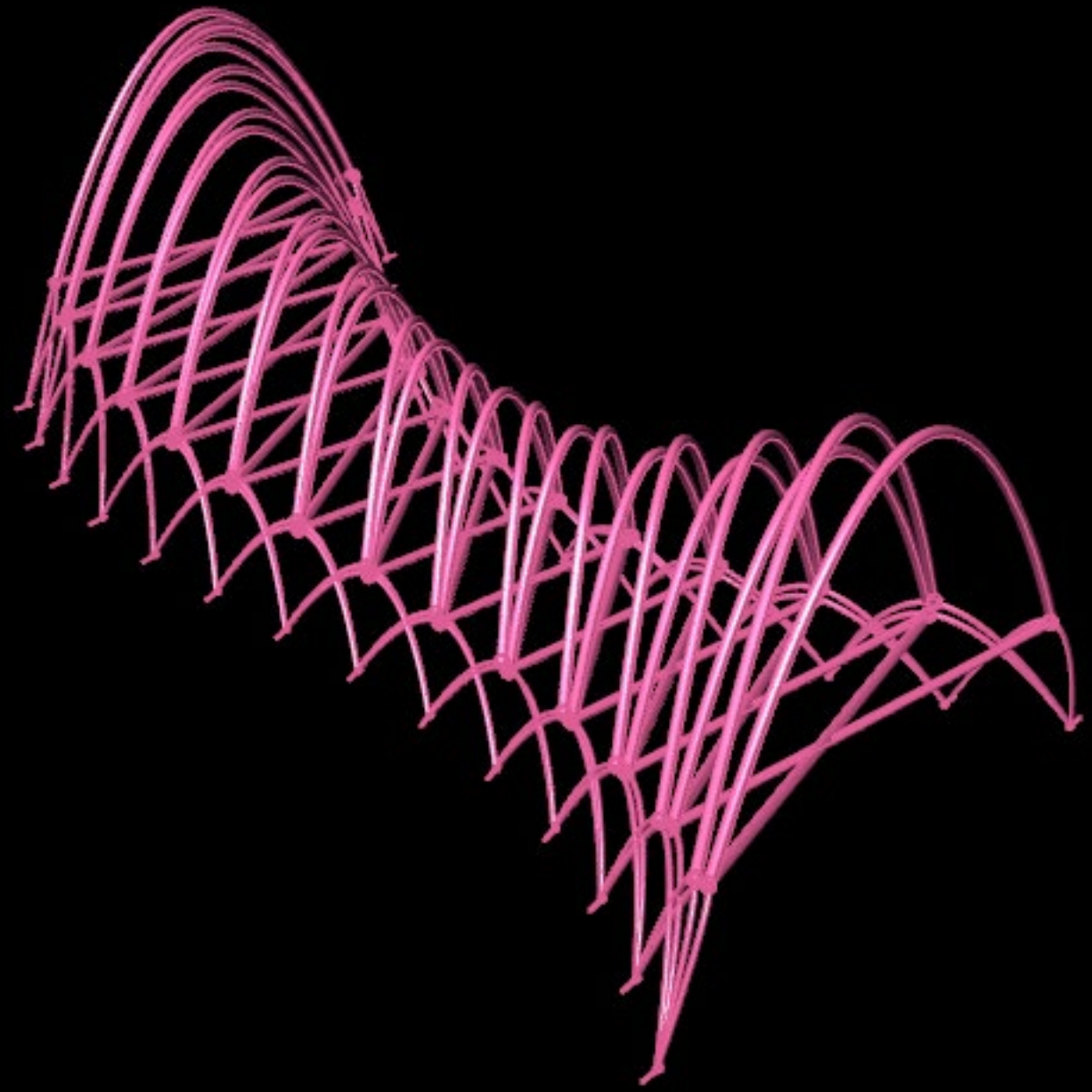
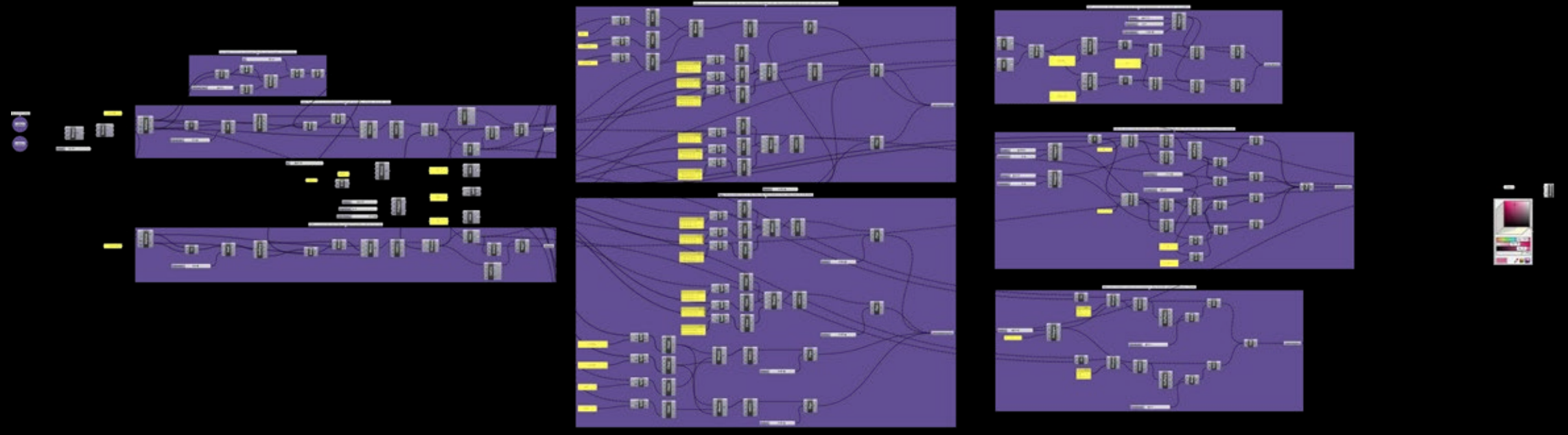


PARAMETRIC ARRAYS

For this assignment, we created a three dimensional array of objects in Grasshopper. We learnt to use the logic of attractor points or other drive geometry to customize our arrays so that they could exhibit some special qualities such as varying the distance between parts, changing the orientation plane for each object, and controlling the display of colors with respect to the drive geometries.





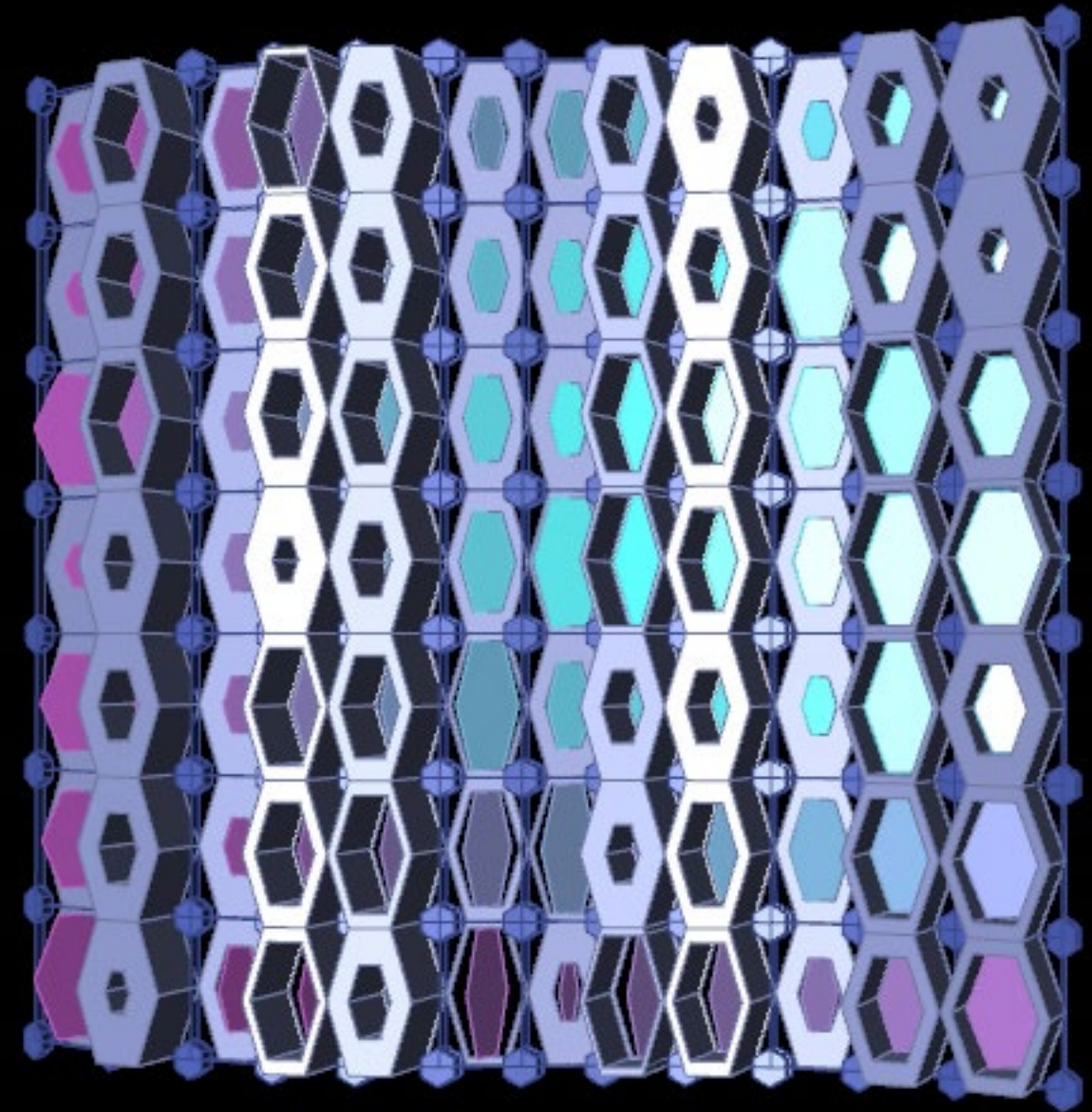
PARAMETRIC TRUSS

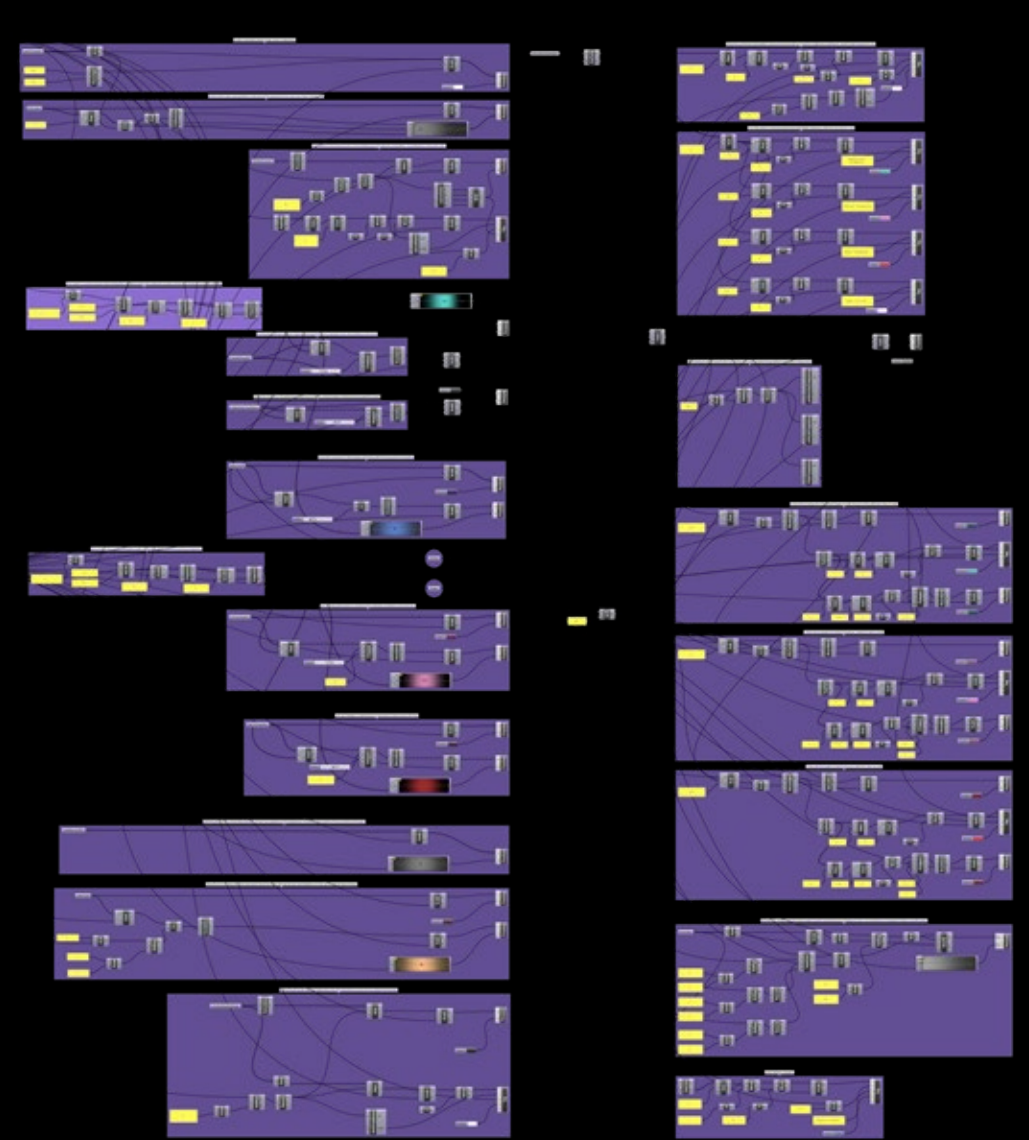
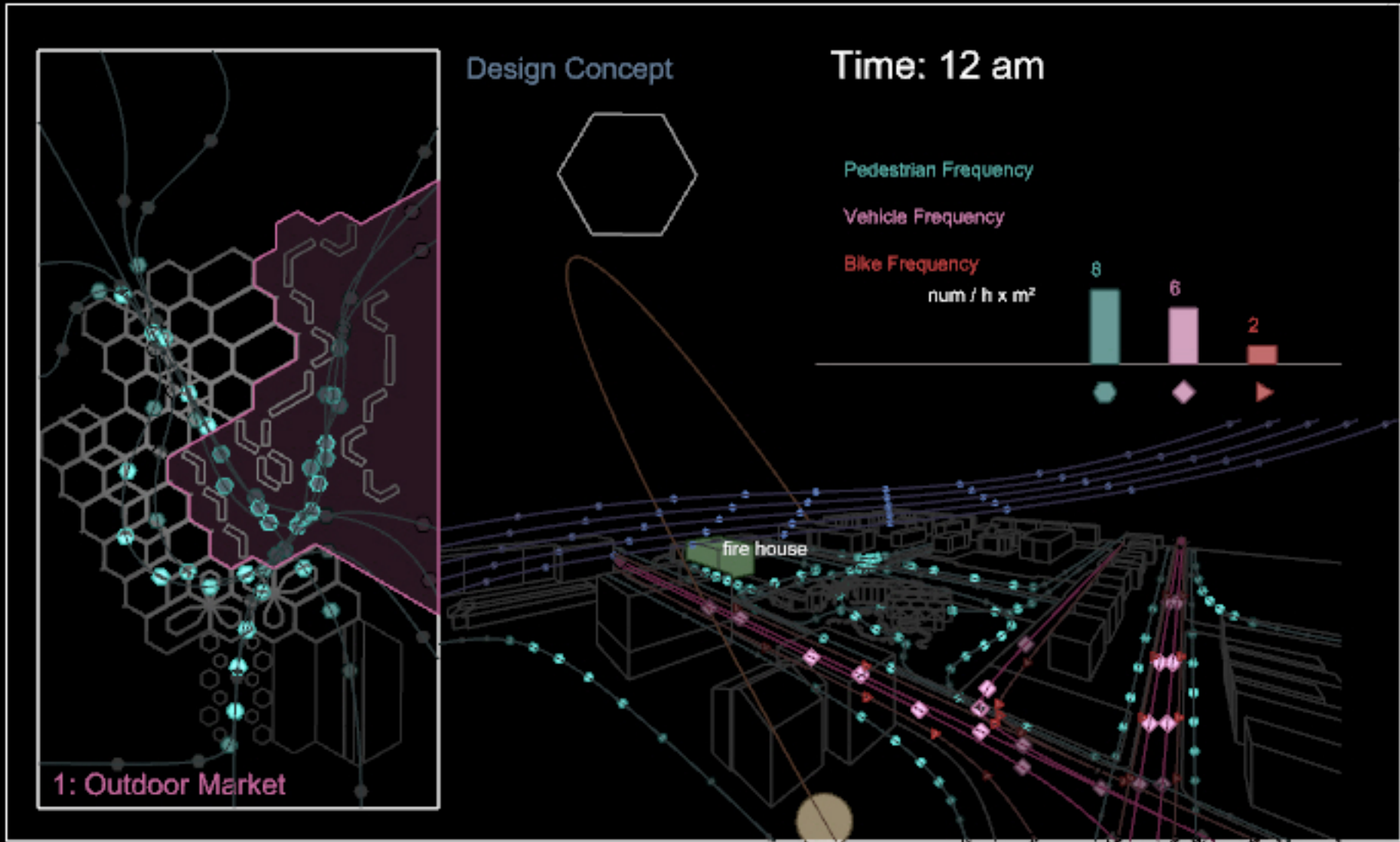
Tectonic framing system in architectural design are prime examples of where parametric affordances can be applied in architectural design. Given two drive curves as inputs, we should create a parametric truss that spans between them with at least three levels of structural hierarchy, at least one type of joint resolved parametrically, and every dimension of structural members parametrically controlled by the drive curves.



PARAMETRIC BUILDING ENVELOPE

For this assignment, we created a parametric building envelope in Grasshopper using a drive surface to generate global shape. The building envelope should include facade panels or building blocks, a secondary structure to hold the system, and extra shading device that responds to changes in the environment. Each dimension, shape, patterning, orientation, and color should be resolved parametrically.





ANIMATIONS IN GH

Data visualization is both an important communication tool and also a generative engine in the design process. Using a current studio project, we created an animation that explores the development of our design relative to important input data, such as environmental conditions, demographic information, and urban circulations. The animation should combine data visualization with dynamic annotations describing the design proposal.