Goals:

            The goal of our project is to research and design a PV-assisted, electric-car charging station. It will be located in Parking Lot F at Drexel University. In order to do this, we will have to consider the amount of sunlight our PV-panel is receiving at any given time. The goal of the first part of the exercise is to find out where shading happens in a given month. Part two like part one, was to simulate the shading from the nearby buildings. But, the goal of part 2 was to create a dynamic shading analysis animation generated by the local objects.

Procedure:

Sketchup was used in order to create the shading animation. The google maps 2D view of F-lot was imported into Sketchup. For the 3D objects around F-lot 3dwarehouse.com was used to generate an accurate representation of the objects. The sketchup software allowed for the ability to accurate select the data and time which allowed for accurate shading. Once the shading tool was in place a dynamic animation for December 21 and June 21 was created.

Conclusions and analysis of static shading: