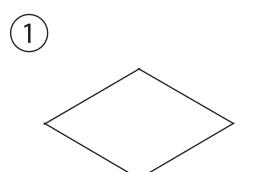
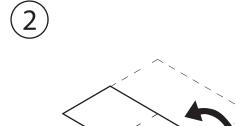
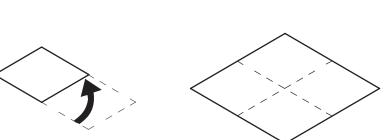
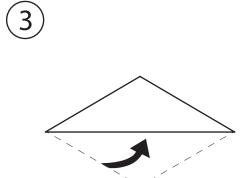
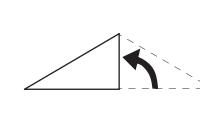
Process Diagram

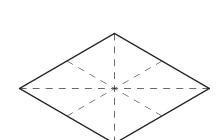


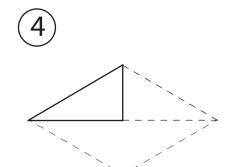


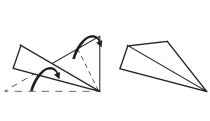


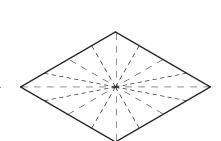


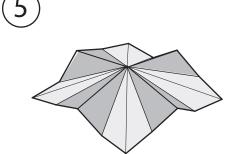


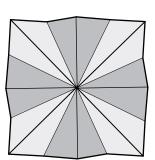


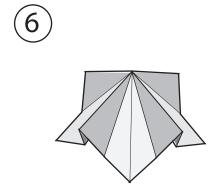


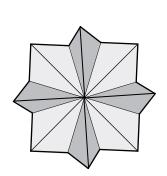


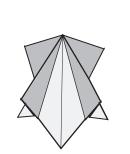












Model Pictures



Description

Our project acts as a sun shading device dependent on arduino response to actuate. The project is designed to fit into the bench niche on CFA lawn to improve upon the existing experience of sitting outside, through giving people the opportunity to accommodate themselves based on the elements. The modules of the system connect to form a grid structure that spans across the ledge to completely shade the bench below. Our device can also be adjusted to let sunlight in when the mechanism is compressed. The device reacts to sunlight through a pull rod arduino system the structural branches push down and extend when sun is detected to maximize sun coverage and then pushes upward to let light in. The structure's kinetic mechanism is inspired by the mechanism of an umbrella, with branchlike aluminum rods supporting the canopy's motion. The modules are able to be operated separately or together depending sun intensity and the material is UV screened to ensure maximum sun protection.

Process Models











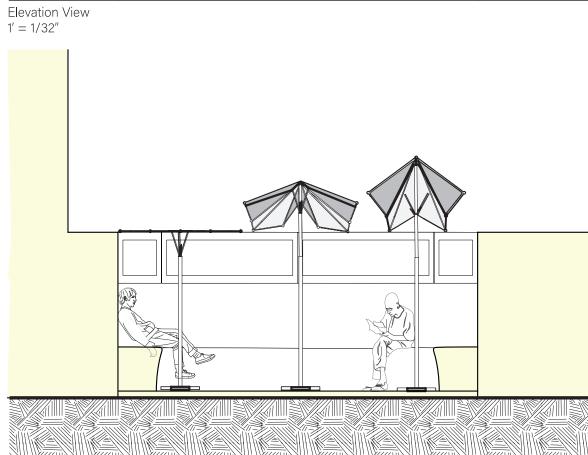












Architectural Drawings

