

## Butterflies on the Shoulder

Chanjuan Chen, University of North Texas, USA

Keywords: Origami, sustainability, transformability



In an effort to combine sustainability into transformable garments, the ensemble was designed as a practical approach to explore how to adopt geometric shapes as patterns while creating garments that are transformable and sustainable. The whole ensemble was made from a few rectangular and square shapes of natural fabric in order to increase efficiency in the pattern making process.

The design was inspired by the origami butterfly. It can be worn in two ways. One is a tunic and skirt, and the other is a dress transformed from the tunic and worn with or without the skirt; in this look the origami shapes resemble butterflies spreading their wings. By combining the incredibly beautiful hemp/silk blend with one side satin and matte on the other, the ensemble demonstrates two styles in different looks and all views.

Origami folding technique and geometric pattern were used in the process. For the first look, I folded four squares into butterflies to create the shoulder parts, and sewed 9 geometric shapes together to create the front, back, and sleeves. The skirt was also made by two geometric shapes with snaps on the waist to adjust the waist size. The second look, the dress, was changed by unbuttoning the snaps on the shoulder seams in the first look. The sleeves in the first look were then tied on the back of the dress as waist sashes. The skirt can be removed or worn as an under skirt as needed.

Throughout the design, the elements of sustainability, origami folding technique, natural materials, geometric patterns, and transformable designs, were combined perfectly. This design further explained the relationship between sustainability and fashion design by developing garments that compliment a growing interest and need for sustainable fashion methods and techniques. Utilizing geometric shapes as patterns allowed me to conserve energy and resources as well as reduce fabric waste and cutting and seams. By combining this idea with a transformable design, a new spectrum of fashion is created.

