

FINAL PROJECT PROPOSAL:
The Constellation Dress

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Github URL: <https://github.com/MaedehSharifi/CART360/tree/master/Final%20Assignment>

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Context and Environment

In modern metropolises, there is a great deal of light pollution. Large industrial and residential areas cause light clutter and excessive use of lighting in the streets causes over illumination. This prevents residents from enjoying the stars in the sky at night since light washes out starlight. Thus, residents of large industrial cities have a very different experience with night time since they can barely perceive any stars in the sky and feel isolation and darkness as a result when looking up. I want to address this issue by creating a piece which can simulate the beauty of a night sky filled with stars and constellations. My project *The Constellation Dress* is a wearable fashion piece designed to recreate the lights of stars through a dress. The goal is to wear this piece at night and display the stars that we are missing in our everyday life. This piece is made for fashion lovers and people living in the city but it can have an effect on anyone who looks at the dress. The message is universal for everyone.

Relationship between the piece and the user

The user simply wears the piece but the greatest impact is on the viewers. The dress filled with blinking lights of all sorts will attract their attention and make them reflect on the purpose of the dress. Anyone looking at the dress will see the lights of many constellations and stars which they cannot perceive in the sky. My goal is for the viewer to live a special experience where they are transported inside the void of the universe and realise the depth and greatness of it. I often times reflect on how small I am when looking at the stars and I realise that I am only a speck of dust in the universe. This is the feeling I want to transmit. We tend to forget about the greatness of the world when we are pushed forward in a society where only capital and achievements matter. I want the viewer to be enthralled by *The Constellation Dress* and take a moment to stop and relax. I want to instigate wonder and awe through my project and inspire people to travel outside the city to witness with their own eyes the splendour of a night sky.

Empowerment through the dress

I can imagine there is a great feeling of empowerment in wearing *The Constellation Dress*. The person wearing the piece will see the effects of the dress in the eyes of the viewers. Human interaction can occur if people ask the wearer about the meaning of the dress or ask any other type of question. The wearer of *The Constellation Dress* is not only wearing a simple dress but also a message. The person is transporting the night sky when walking and will creatively inspire other people by doing so. Often times, the greatest accomplishment someone can get when creating an art piece is to see other people's eyes light up in admiration or hear about the emotions they feel when contemplating the artwork. *The Constellation Dress* is designed specifically to be worn outside and is even more effective on windy occasions. Since the front part is open, it is relatively easy to walk with it and the trail can move in any direction the wind blows. The fabric chosen will be specifically adapted to be free moving and flowy. Depending on the direction of the fabric a sensor will cause different constellations to light up and blink so that the piece is interactive and

constantly changing. The relation between the wearer and the viewer is on a subconscious level when they both decipher a meaning to the dress and can further develop the relationship into a more concrete manner if the viewer wants to address the purpose of the dress or ask questions to the wearer. In both cases, there is connection being made since *The Constellation Dress* is challenging their view on the world and more particularly on the night sky.

The meaning behind the dress

An artwork can also be interpreted in many different ways depending on how the viewer perceives and interacts with it. The Constellation Dress carries a message only when a person gives his own meaning and interpretation to the piece. From my perspective, the dress is supposed to replicate the feeling of a night sky and compels the viewer to look at it and lose himself in the countless star light defining our view of the outside world. *The Constellation Dress* acts as a portal to the stars and galaxies constituting our world. Through these lights, the viewer will perceive many constellations and get a sense of the infinity of our universe and of how small humans are in comparison to what lies beyond our reach. *The Constellation Dress* is a reflective piece as well as an interactive wearable which can carry a multitude of meanings depending on the eyes of the watcher.

Three similar projects:

1) The Galaxy Dress



The ‘Galaxy Dress’ claims to be the largest wearable display in the world and it will be the centerpiece of an exhibit at the Museum of Science and Industry in Chicago.

“We used the smallest full-color LEDs, flat like paper, and measuring only 2 by 2 mm,” say designers Francesca Rosella and Ryan Genz. “The circuits are extra-thin, flexible and hand-embroidered on a layer of silk in a way that gives it stretch so the LED fabric can move like normal fabric with lightness and fluidity.” The duo run an interactive clothing company called CuteCircuit.

To diffuse the LED light, the dress has four layers of silk chiffon and a pleated silk organza crinoline skirt. The extra-thin electronics allow the dress to follow the body shape closely like normal fabric.

Instead of having one large and heavy battery, the dress is designed to run on many tiny iPod batteries hiding in the crinoline, says Rosella. “They are not visible or uncomfortable,” she says. With the batteries, the Galaxy Dress wearer can walk around — all lit up — for anywhere from 30 minutes to an hour.

The areas without LEDs are decorated with more than 4,000 hand-applied Swarovski crystals that range in color from clear to bright pink. “The dress looks good even when it is switched off,” say the designers.

So far, the dress hasn’t been worn by any real woman. It went straight from the fitting model to the museum.

Source: <https://www.wired.com/2009/11/led-dress/>

2) Glow in the dark dress



This glow-in-the-dark dress is an innovative concept created by San Francisco-based designer Natalie Walsh. To create the concept, the artist first designed a basic white dress with a puffy skirt and pouches to hold the handle of her light source. She then wrapped fiber optic filaments, from Ants on a Melon, around the body of the dress to produce the glowing shape and then let them cascade down towards the floor in a unique and playful skirt.

As the model moves and walks across the room, the various fiber optic lights are constantly changing in a rainbow of colors. “The inspiration for this dress followed the first time I saw this fiber optic product in action,” explains Walsh. “I was at a festival when I saw a bloom of fiber optic jellyfish approach, and they created such a beautiful effect that I knew I had to turn the concept into something wearable.”

Fiber optic filaments encompass the body of the frock to create the glowing shape. The ends of the optic cables are left dangling freely on the lower portion of the dress, mimicking a longer, flowing shape.

As the wearer walks, dances or moves in any direction the garment changes colors and swirls. When the surroundings are super dark, the glowing effect is drastically amplified. The wearer can barely be seen, but the dress' outline easily stands out thanks to the woven and dangling lights.

Source: <http://mymodernmet.com/natalie-walsh-fiber-optic-dress/>

3) Claire Danes' Cinderella dress



Claire Danes' magical light-up Cinderella dress was worn at the Met Gala.

Zac Posen the designer of the dress explained: 'I'm interested in that place, where the past and the future meet, because that's universal and that hits a chord around the world...just recognizing beauty and a magic moment between fantasy and technology.'

To make the dress light up, LED lights and 30 mini battery packs were sewn into the lining. 'You're looking at light traveling vertically,' Posen explained.

And to keep it as light as possible, the dress was hollow inside, overlayed with the delicate, almost transparent, Gossamer.

The designer also added a raw-edged hem to keep it looking modern.

Source: <http://metro.co.uk/2016/05/05/it-took-6-people-600-hours-to-make-claire-danes-light-up-cinderella-dress-5860428/>

Conclusion :

I believe my project to be different from the three examples I found because it has a deeper purpose and more interactive features. I want my dress to exactly replicate specific constellation and not simply light up for no inherent reason. Furthermore, thanks to the use of sensors, my dress will light up by itself only when it is dark outside and will light up different constellations depending on the direction of movement of the dress. Thus, the dress does not simply serve an aesthetical purpose by lighting up but carries a meaning by replicating the lights seen up in the sky. However, I will incorporate elements which I find interesting from the examples I found. I like the idea of utilising fiber optics in order to light up the dress instead of simple LED's. Fiber optics are much more thin and would be easier to place on a dress. The filaments would move much more easily through the wind and create a flowy effect. They emit less light than an LED which is perfect since I do not want to create an overabundance of light from the dress. The tip of each fiber would serve to imitate the light of a star. Overall, I like inspiring myself of various projects to include elements I find interesting in my own project but with my personal concept in mind.

Storyboard:

