

## Hallowed Shores

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**Key Words:** Surface Design, Textile Innovation, Free Standing Lace

**Mentor Statement:** The purpose of this mentorship relationship was to assist Apparel Design and Manufacturing seniors in exploring and attaining the high-level design and construction skills required to become successful professionals in the apparel industry. Each student in a studio-based class was challenged to design and construct a competition-worthy garment. The department encourages students to push their design skills beyond their previous experience and create engaging, marketable designs. The student pushed themselves outside their previous experience by creating engineered lace using embroidery. This design was chosen to be sponsored based on its high quality of construction and the exemplary problem-solving skills the student displayed throughout the design and construction process.

**Design Statement:** As a designer, I am always looking for ways to use design elements in non-traditional ways. This garment was an opportunity to explore digital design software that is available in the industry, and an endeavor in executing common surface design applications in new and innovative ways. The unique challenges set forth by this undertaking proved to be a valuable learning experience and have helped me grow as a designer in numerous ways.

While the base dress of the ensemble is relatively simple, the three-layered construction did present challenges. The darker blue lining was intended to match the cloak and tie the garment together but I recognized that putting this material would show through to the outside if placed directly beneath the cream-colored shell. To preserve the bright, lustrous appearance of the silk, a second layer of lining was constructed of a lightweight white textile that would act as a sort of canvas for the outermost layer. By using multiple layers of fabric in this way, each layer was carefully scaled down by the smallest margin to prevent any puckering on the lower layers. Hand tacks were added along the seams to ensure that the lining layers would not get twisted around the body, creating visible ridges where the seam allowances did not match up with those on the shell.

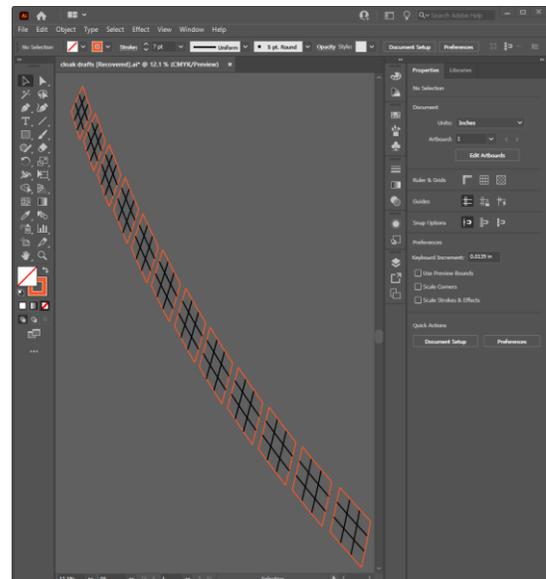


Figure 1: Drafting embroidery in Adobe Illustrator

The most striking feature of the garment, however, is the cage bodice and attached cloak, made entirely from panels of Free Standing Lace embroidery (FSL). FSL embroidery is designed to hold its' shape without fabric. The digital embroidery files are comprised of multiple overlapping layers of

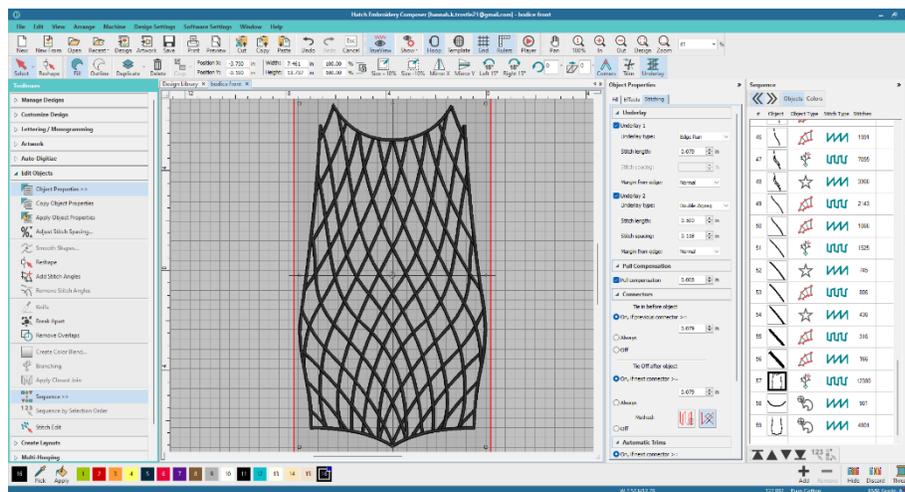


Figure 2: Digitizing embroidery in Hatch software

Adobe Illustrator. From there, I was able to digitally draft the layout of the cloak so that it would attach to the bodice and form a single garment when sewn together. Getting the shape of the cloak right was a difficult mathematical endeavor that was further complicated by the sizing of my embroidery hoops (Figure 1).

Additionally, the bodice front piece had to be repeatedly reshaped in order to get it into the confines of my largest hoop. Once the outlines of all pieces had been successfully drafted, I added the expanding diamond shape to each piece, carefully mapping it out so that the pattern would be continuous from panel to panel. When all pieces had been fully drafted, I began the process of digitizing them individually using Hatch Embroidery software (Figure 2). For each piece, I used two layers of stitching; a tatami stitch layer to create a stable base, and a satin stitch layer to create a clean finish. The tatami layer was made to be just barely narrower than the satin layer to ensure it would all be covered up when stitched over. Each layer of stitching was accompanied by an edge-run underlay and a zigzag underlay to further enhance the structure. In order to minimize registration issues when stitching, the stitch output was organized so that each individual line segment would have its' tatami layer stitched, immediately followed by its' satin layer before moving onto the next segments. This results in the least possible back-and-forth motion by the machine and reduces the possibility of major registration errors and misalignments. Once panels had been embroidered, rinsed, and dried, I began piecing them

stitching that work to create a frame for the embroidery to sit on. Once these pieces have been designed, they are embroidered onto a water-soluble stabilizer which can then be washed out, leaving behind only the thread. To execute this process, I first draped the bodice pieces and scanned the resulting patterns into



**Figure 3:** Hand beading cloak and bodice

together and using a zigzag stitch to attach panels edge to edge. In this way, the entire cloak and bodice took shape as a single piece. Bindings were added to the bodice to create a cleaner finish and reinforce the seams that gave the piece its structure. From there, the beaded accents were added by hand to finish the piece (Figure 3).

I am always looking to further my education within the design industry be it through school or personal endeavors such as this. This piece allowed me to explore and get extensive experience with a new software. The techniques I learned through this project will be very useful in my career and additionally have helped me to develop a more diverse portfolio and skill set. Every issue that came up in this tedious process gave me an opportunity for on the spot problem solving and allowed me to use critical thinking as a designer to overcome obstacles.

