

Digital Organics

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The original prompt for this design was to explore the relationship between technology and cotton through the use of a Jacquard loom, given by the Cotton Quintessential Competition in Fall 2013. Inspiration for this piece stemmed from the concept of pixilation and its fundamental element to our digital world. In relation to cotton fibers and textiles, pixels may relate to how a fabric is structured and dictate design. This is especially true for developing jacquard woven designs since every stitch that shows on the surface of the fabric corresponds to a pixel on the computer screen. This piece juxtaposes the relationship of the cotton fiber at its origin with the building blocks of a digital platform. By the rapid use of new technologies and the internet, one could imagine that the cotton field before you has been harvested long before the cotton is ever picked. With demand for new styles of clothing and textiles as high as they are, it is important that sustainable farming methods are utilized for consumer crops such as cotton. This tapestry attempts to begin a narrative on the impact of our digital lifestyles that ultimately affect organic forms in nature.

Adobe Illustrator was used to initially construct the design and overall layout. It was important to keep in mind during this process, for each color present a corresponding weave structure would need to be assigned from a given color blanket. These colors in the color blanket are pre-registered and assigned within the jacquard looms software. After color selection had taken place, the design file was placed into the jacquard EAT software. This software allows for reducing of colors in a given design and ultimately assign certain colors to a given weave structure. The EAT software allows the designer to prepare the design file to be readable by the loom. This also ensures that the given design fills the width of the finished fabric whether it is the full 54" warp, or repeated within that width (twice with 27" width, or four times with a 13.5" width for each image.) In this design, eight colors were present in the original design, so eight weave structures were selected in the EAT software. The jacquard loom used is a Dornier PTS 8/J machine with a Staubli LX 1600 jacquard head. This loom contained a warp with 100%

cotton yarns. This design was then woven with 100% acrylic yarns, resulting in a 50% cotton, 50% acrylic fabric.

Measurements of Tapestry: 54" width, 62" height

