Hitomezashi Wallpapers

This wall-hanging triptych explores the 9 wallpaper symmetries that can appear in hitomezashi-inspired designs that are generated by two binary strings. These designs are hand-stitched on a grid, where separate threads form the horizontal and vertical lines in a running stitch; the only decision for each horizontal and vertical line is whether to begin the thread above or below the fabric (and this directly corresponds to the “0” or “1” in a binary string). One of the beautiful features of this form of sashiko is that the back of the design is just as lovely as the front. To celebrate this duality, these wallhangings are completely reversible, and I encourage viewers to turn them over on the wall to view them on whichever side they desire!

Medium: Sashiko thread on cotton/linen fabric.

From a young age, I have been enamored with a wide variety of textile arts. Sewing, knitting, crocheting, quilting, and embroidery are all crafts that I love. My mathematical training is as a combinatorist, where patterns and enumeration are at the heart of my research. My mathematical art is a marriage of these two: I love exploring the patterns and theory of fiber arts and using that knowledge to create my own designs.