**ABSTRACT** 

The process of making batik traditionally takes a long time. From the many stages

in the process of making batik, the stages of scratching usually take a long time.

Scratching is to draw a batik motif either on paper or directly on a cloth. Because

at this stage the batik maker must think of the desired motive idea, after getting an

idea, then the batik maker will draw it on the paper or cloth. With the

development of current technology and current science, it can shorten the time

needed to create patterns and produce motifs that are more varied by using

mathematical models or computational methods. In this Final Project, the

Random Walk and Cellular Automata method will be used to develop octopus as a

batik motif and produce patterns with many variations.

Keywords: Batik, Scratching, Random Walk, Cellular Automata

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