

**COMPUTER BASED ISLAMIC GEOMETRIC PATTERN  
MANIPULATION**

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## DECLARATION BY CANDIDATE

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of the other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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## **ABSTRACT**

Islamic geometric patterns (IGP) occur in a variety forms including carpets, ceramics, tiling and others. The design can be created using the instinct, the existed template or random tiling. Muslim artists produced geometric pattern in different periods of time and locations with only the help of a ruler and compass. They able to create many patterns with these two tools. The development of surfaces in modern structures enjoys the advance of digital technology. The development of manufacturing technology has also enabled the construction of various experimental shapes. In this research, computer software Taprats has been used to produce IGP. Taprats presents a user interface that allows the user to choose for the motifs in each tile shape and to edit the degrees of freedom in the design elements directly.

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