The Hilbert Curve \Leftrightarrow Thue-Morse Sequence

Douglas M. McKenna

Department of Hierarchæology Mathemæsthetics, Inc. Boulder, Colorado USA

doug@mathemaesthetics.com

G4G15 Gift

Abstract

The Hilbert Curve comprises multiple, smaller-scale Hilbert Curves. At each scale, each sub-curve is oriented either horizontally or vertically, all piecewise-connected into a continuous traversal of the square. We show (without words) that the sequence of these orientations is the same as the Thue-Morse sequence.

