## **Algorithm 1** Wavelet Row Transform 1- D to 2-D Method **Require:** Wavelet Transform, and Wavelet Pair ( $\psi$ and $\phi$ ) Require: Matrix, $S \in \mathbb{R}^{N \times M}$ for i = 0 to N - 1 do R = S.getRow(i) $S.row(i) = [R * \phi, R * \psi]$

end for