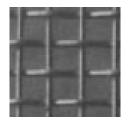
CS 663 Project Report

Mohil Patel:- 160070002, Sahasrajit Sarmasarkar:- 160070010, Divyam Bapna:- 160070038

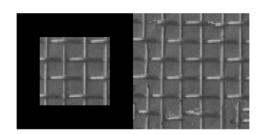
November 21, 2018

1 Experimental Results

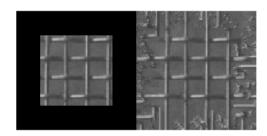
1.1 Texture 1



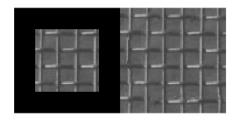
(a) Texture 1



(a) Rebuilt Texture $W=15~\&~\epsilon=0.03$

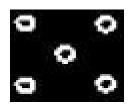


(b) Rebuilt Texture $W=5~\&~\epsilon=0.03$

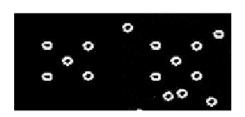


(b) Rebuilt Texture $W=23~\&~\epsilon=0.03$

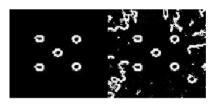
1.2 Texture 2



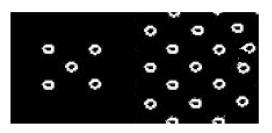
(a) Texture 2



(a) Rebuilt Texture W=15 & $\epsilon=0.03$

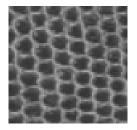


(b) Rebuilt Texture W=5 & $\epsilon=0.03$

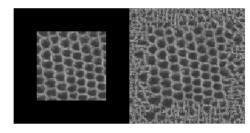


(b) Rebuilt Texture $W=23~\&~\epsilon=0.03$

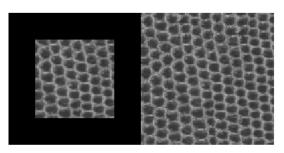
1.3 Texture 3



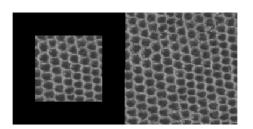
(a) Texture 3



(b) Rebuilt Texture W=5 & $\epsilon=0.03$



(a) Rebuilt Texture $W=15~\&~\epsilon=0.03$

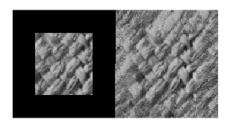


(b) Rebuilt Texture $W=23~\&~\epsilon=0.03$

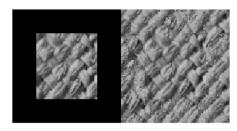
1.4 Texture 4



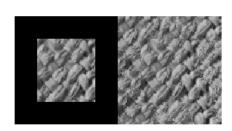
(a) Texture 4



(b) Rebuilt Texture $W=5~\&~\epsilon=0.03$

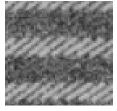


(a) Rebuilt Texture $W=15~\&~\epsilon=0.03$

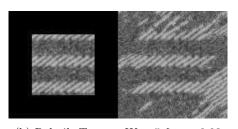


(b) Rebuilt Texture $W=23~\&~\epsilon=0.03$

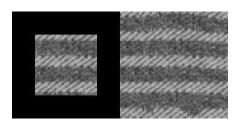
1.5 Texture 5



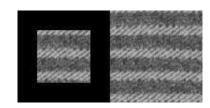
(a) Texture 5



(b) Rebuilt Texture W=5 & $\epsilon=0.03$

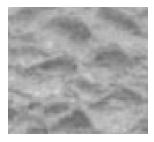


(a) Rebuilt Texture $W=15~\&~\epsilon=0.03$

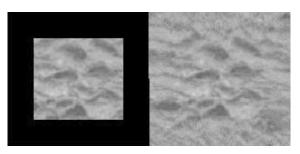


(b) Rebuilt Texture $W = 23 \& \epsilon = 0.03$

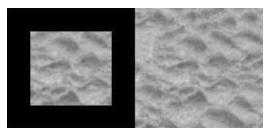
1.6 Texture 6



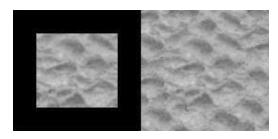
(a) Texture 6



(b) Rebuilt Texture $W=5~\&~\epsilon=0.03$



(a) Rebuilt Texture $W=15~\&~\epsilon=0.03$

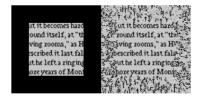


(b) Rebuilt Texture $W = 23 \& \epsilon = 0.03$

1.7 Texture 7

ut it becomes hard ound itself, at "the ving rooms," as H escribed it last fal at he left a ringing core years of Moni

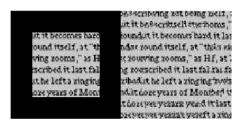
(a) Texture 7



(b) Rebuilt Texture W=5 & $\epsilon=0.005$

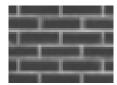
ut it becomes hare ound itself, at "th ving zooms," as H escribed it last fal at he left a ringing oze years of Moni the littland influence faleft, at nout it becomes hardonns I are a round itself, at "thereog as round itself, at "thereog as round itself, at "thereog as round grooms," as left, at a left a ring ing ing ing the property of Moni," "as I as you so be a round in the left a ring ing ing ing a round by here years of Moni," as I as round here as a round here as a round here as a round in the left a round in the left a round in the left a round here as a round in the left a round in the l

(a) Rebuilt Texture W=15 & $\epsilon=0.005$

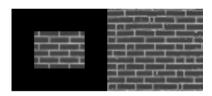


(b) Rebuilt Texture $W=23~\&~\epsilon=0.005$

1.8 Texture 8



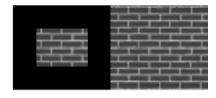
(a) Texture 8



(a) Rebuilt Texture $W=15~\&~\epsilon=0.005$

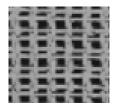


(b) Rebuilt Texture $W=5~\&~\epsilon=0.005$

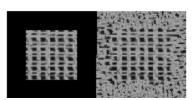


(b) Rebuilt Texture $W=23~\&~\epsilon=0.005$

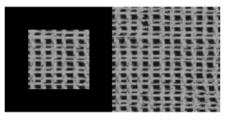
1.9 Texture 9



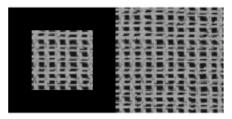
(a) Texture 9



(b) Rebuilt Texture W=5 & $\epsilon=0.005$



(a) Rebuilt Texture $W=15~\&~\epsilon=0.005$



(b) Rebuilt Texture $W=23~\&~\epsilon=0.005$

1.10 Image Extension



Figure 19: Original Image



Figure 20: Extended Image

2 Observations

- Our results clearly demonstrated that on increasing size of square patch the reconstruction of output image improved which tallied with the observations made in the paper.
- This could be explained from the fact that these are textures and there is repetion of blocks of pixels. To ensure that repetition is captured correctly we have to choose correct size of square patch.
- Also there is a possibility of wrong pixels being chosen for reconstruction which would get repeated again and again and thus result in inaccurate reconstruction since the model of probabilistic.