

Problem Set 7

Laplacian Smoothing



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CAD REPORT

NOTE: The software used to render these images is called “view3Dscene” for MacOS. There may be changes between the renders of this software as compared to other professional softwares.

Face Parameters Used:

e 600 50 0 THIS IS THE VIEWPOINT

q 0 0 0 THIS IS THE ORIGIN OF ZEBRA BOARD

a 0 0 1 THIS IS ONE OF THE VECTORS DEFINING THE ZEBRA BOARD

b 1 1 0 THIS IS THE SECOND VECTOR DEFINING THE ZEBRA BOARD

d 1 0 0 THIS IS THE DIRECTION ALONG WHICH THE ZEBRA PATTERN CHANGES

B 35 THIS IS THE WIDTH OF BLACK BAND

W 35 THIS IS THE WIDTH OF WHITE BAND

No smoothing:



N=1



N =5



$N = 10$



$N=50$



CAR PANEL 2:

Parameters Used:

e 600 50 0 THIS IS THE VIEWPOINT

q 0 0 0 THIS IS THE ORIGIN OF ZEBRA BOARD

a 0 0 1 THIS IS ONE OF THE VECTORS DEFINING THE ZEBRA BOARD

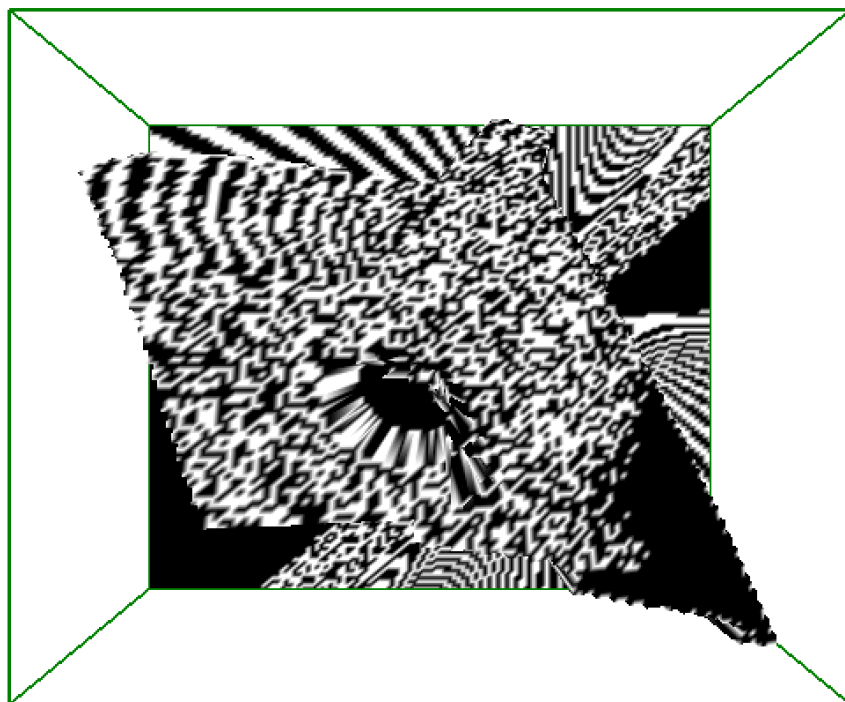
b 1 1 0 THIS IS THE SECOND VECTOR DEFINING THE ZEBRA BOARD

d 1 0 0 THIS IS THE DIRECTION ALONG WHICH THE ZEBRA PATTERN CHANGES

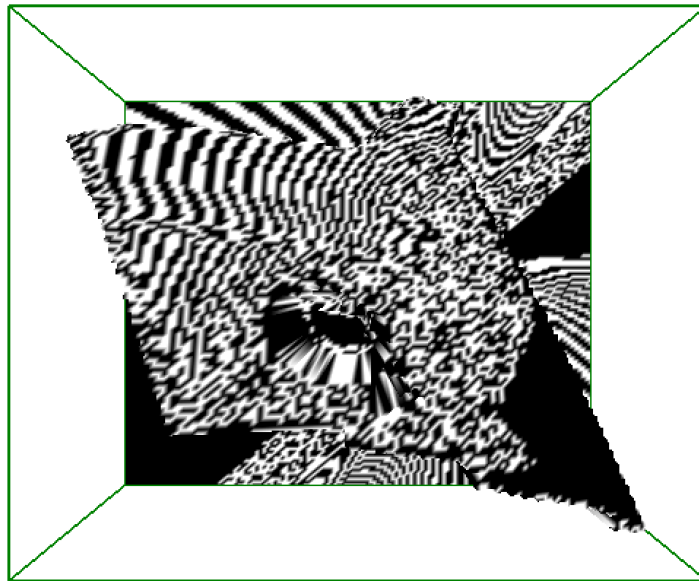
B 12 THIS IS THE WIDTH OF BLACK BAND

W 15 THIS IS THE WIDTH OF WHITE BAND

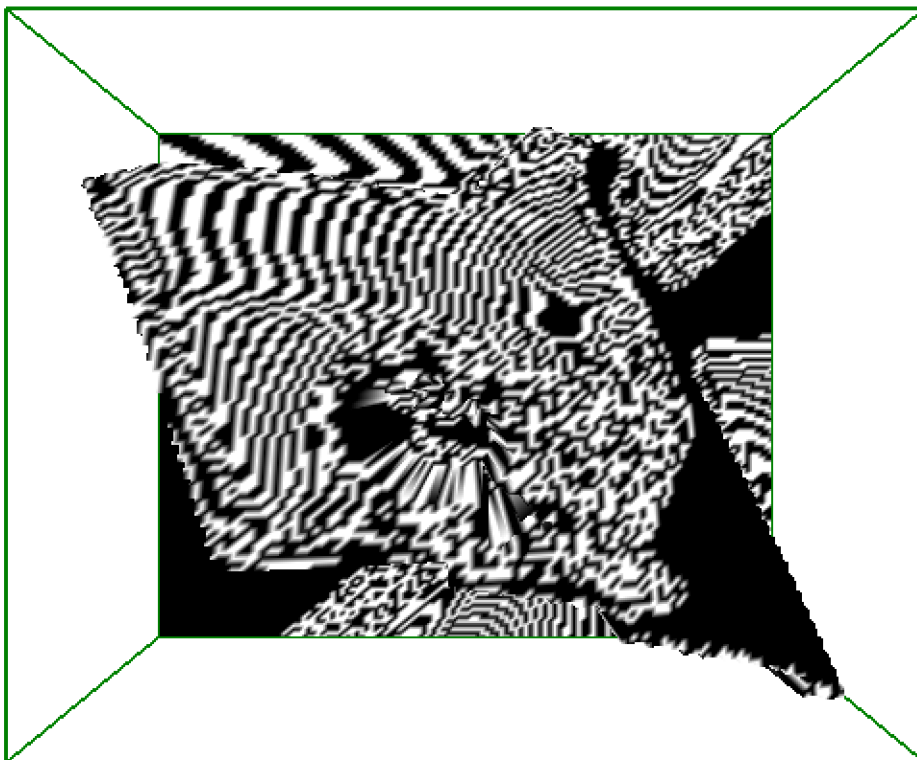
No Smoothing



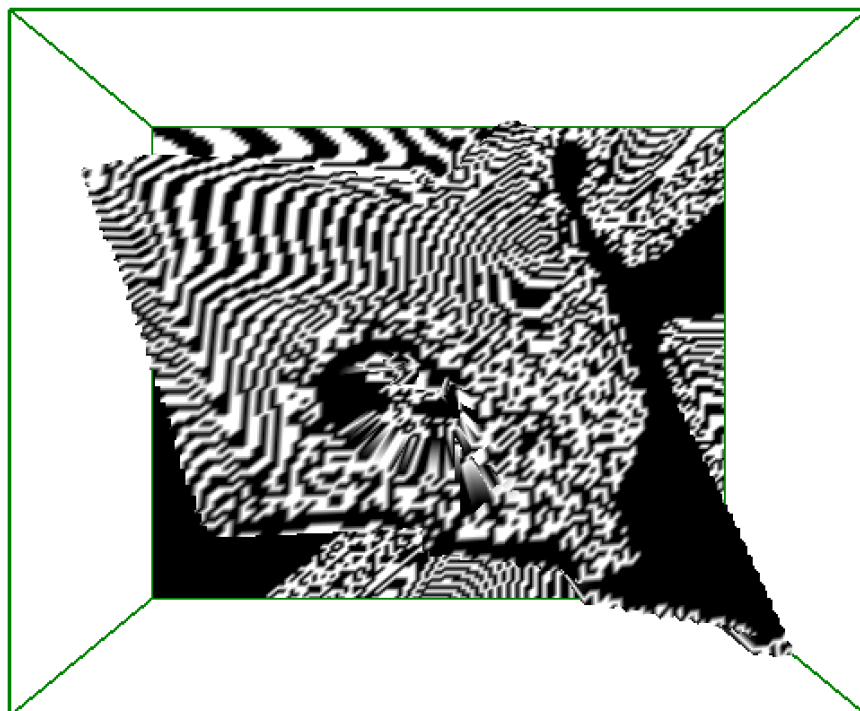
Smoothing $N = 1$



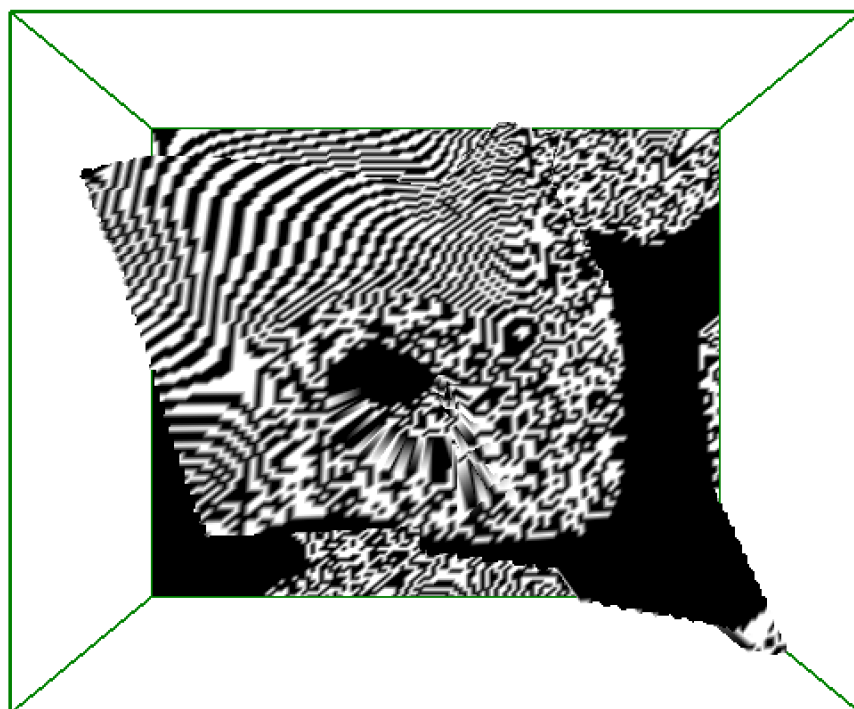
$N = 5$



$N = 10$

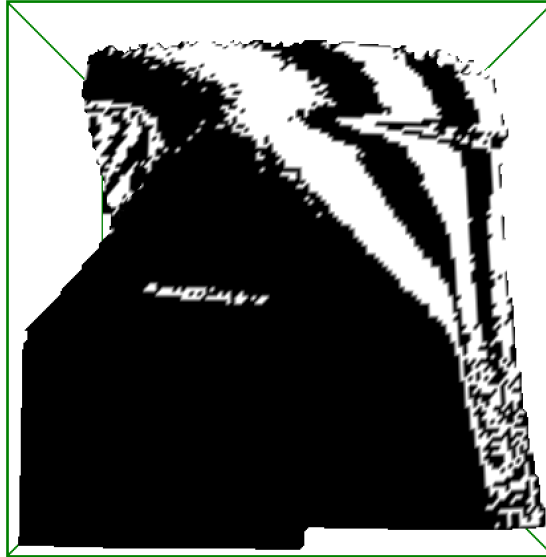


$N = 50$

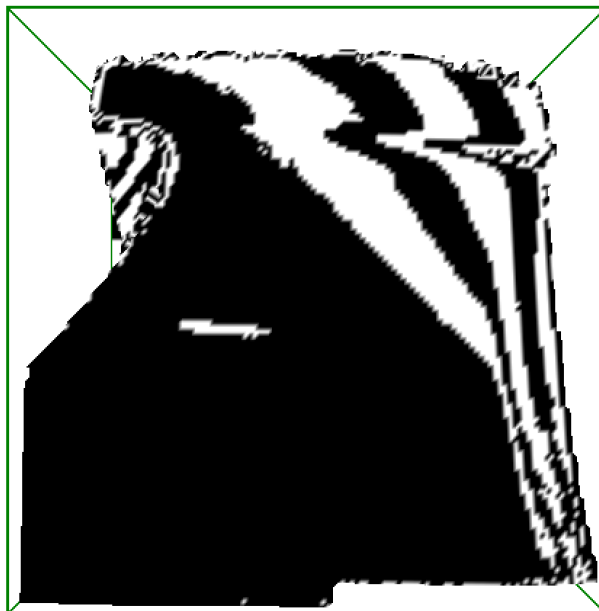


CAR PANEL 1:

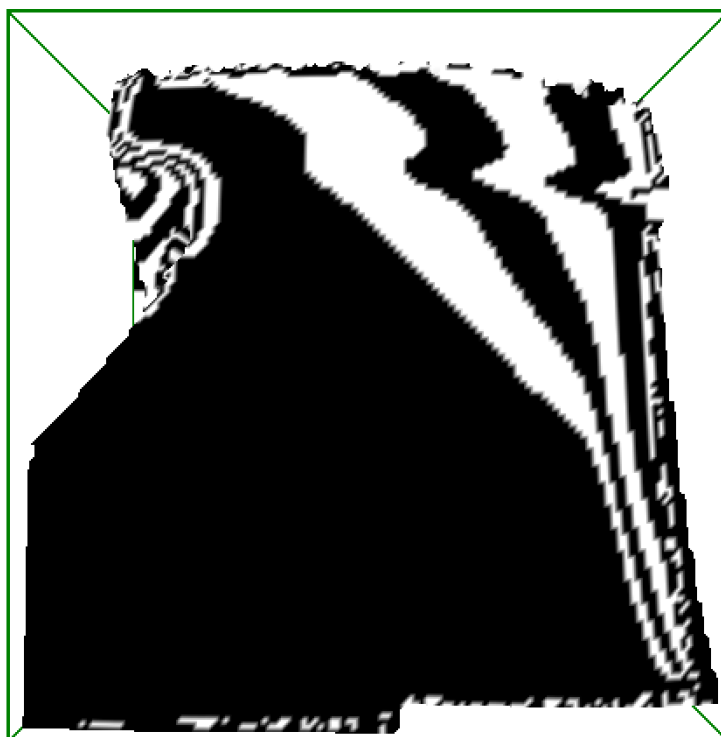
$N = 0$



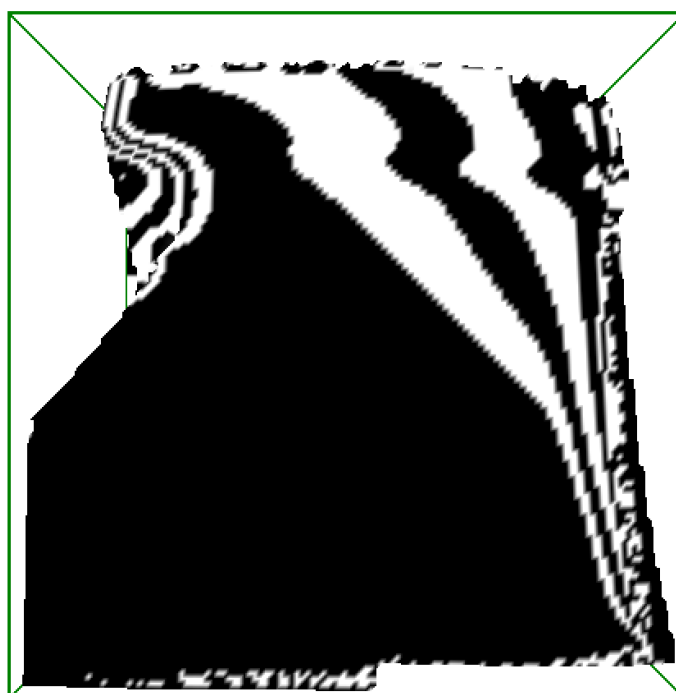
$N=1$



N=5



N = 10



$N = 50$

