Nick Snyder

1.

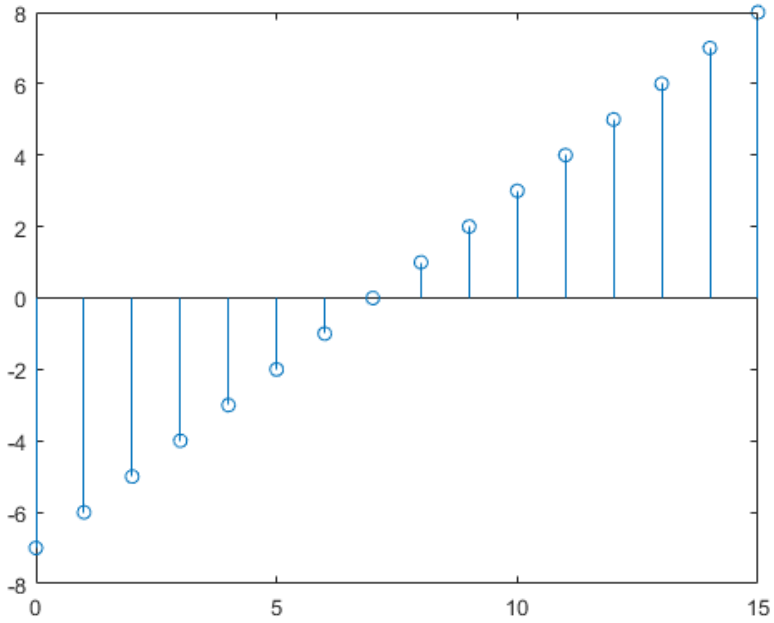
Diagram

1	4	5	11	13	2	4	5

1	1	4	5	11	13	2	4	5	5

0	3	1	6	2	11	2	1	0

3	4	7	8	13	13	3	1



3	4	7	8	13	13	3	1

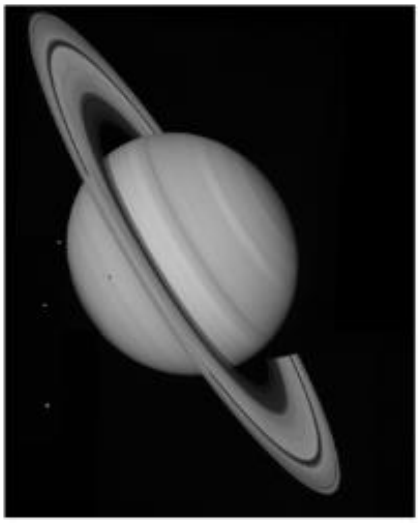
-4	-3	0	1	6	6	4	-6

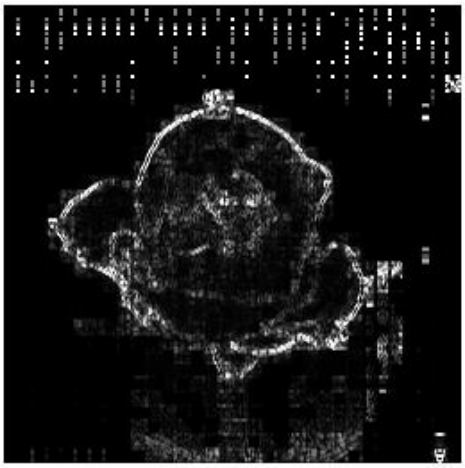
-3	1	5	12	19	8	0	-1

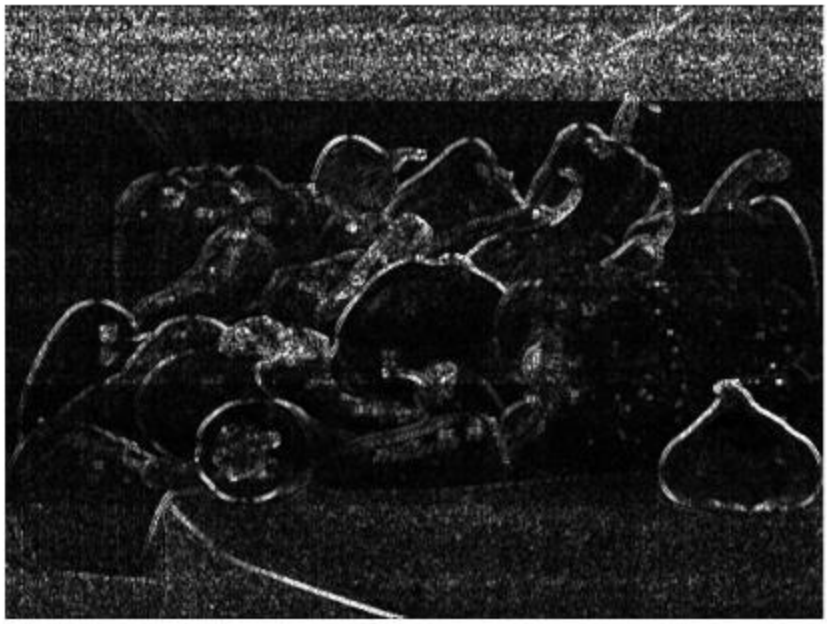
2.5	3.75	7.5	8.75	15	15	2.5	0

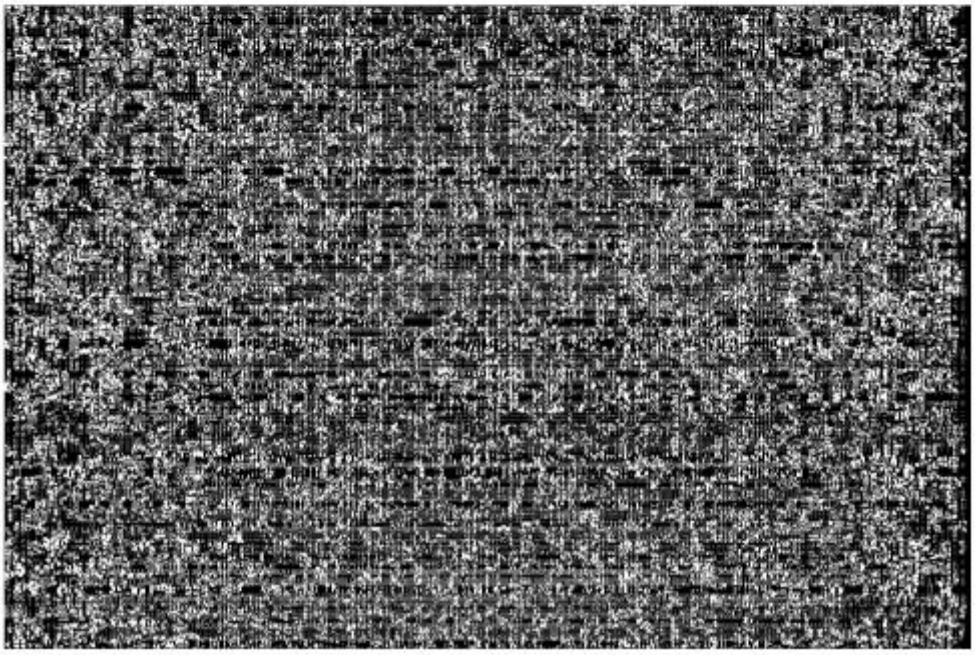
3	4	8	9	15	15	3	0

This method works by computing the difference between a pixel's left and right or up and down neighbors and then combining each. An LUT is used to essentially score how much a pixel is different from its neighbors and this value is finally combined with the original pixel values to create the image shown below.









I found gramp.jpg interesting because my algorithm doesn't work when pixels have no or constant spatial frequency.