Nowadays, when the times growth, the needs of digital video data is increasing, wheteher the company, entertainment industry, telecomunication service, and for personal uses . This make digital video technology an important necessity. The biggest problem that we have to face is the size of the video is too big. Shannon Nyquist's sampling theorem said if we cutthe signal very close (in Nyquist line), so we can reconstruct the data analog perfectly.

In this last project, video is taken from internet and recorded by using camera digital. So I can measure PSNR, MSE and computate time and using *Hadamard Projection Transformation* as projection transformation, where the image/video will have measurement. After thatthe image/video will be reconstructed using basis pursuit.

From the research results, we know that the projection transformation Hadamardwithout AWGN channel get PSNR score video *input gray scale* about7.02 dB – 24.43 dB. While forthe PSNR score,the projector transformation Hadamard with AWGN of 10 db about 7.25 dB – 18.22 dB. And time to computate of compressive sensing about 0.61 seconds – 3.37 seconds.

Key word: *Compressive Sensing*,Hadamard Projection Transformation , *basis pursuit*.