ABSTRACT

Augmented Reality (AR) is a technology which allowed augment visual object to real environment. Because of the complexity of system which needed to realize AR and its age, because of that there is several error whether on input or output. Some error which still appears frequently is static error, dynamic error and registration error. Dynamic error is a error which exist because of motion on input, this error can be reduced with some non-technically ways, which is replacing the camera with higher frame rate camera or replace entire system with high specification system. In this final project will be created a technically engineering solution to reduce dynamic error on AR with predict view point which has high accuracy and computation time.

Result of design is 5 type of prediction model among other Type I, II, III, IV and V. Fastest model is type III on UF = 5 with computation time 0,155041 seconds and time benefit factor 0,775205 s. Best model in term of PSNR is type IV with PSNR 28,11 dB on UF = 5. Best model in result of MOS is type III with average MOS value is 3.

Keyword : Augmented Reality, Dynamic Error, Moving image prediction, Video processing.