

## ***ABSTRACT***

*Wind speed has a great influence on the lives, such as one element of weather climate that is used to determine the regional climate. Besides wind speed is also a factor that greatly considered in airport as aircraft landing considerations. Therefore there is need for prediction system of wind speed for some time later.*

*In this thesis I did a wind speed prediction using neural network autoregressive with exogenous inputs (NNARX). NNARX is a variant of ANN by utilizing exogenous inputs in the learning process.*

*At the end of the study can be concluded that NNARX have more capabilities than the ANN if the exogenous inputs used to have strong relations with the predicted data*

*Keywords: NNARX, ANN, predictions, wind speed, exogenous inputs*