

# SE&T Colloquium Series-Winter 2015

Speaker	Dr. Young-Man Kim Department of Electrical and Computer Engineering
Title	<i>Application of Control Engineering to Wind Energy</i>
Abstract	<p>In this research, an adaptive threshold setting method is developed for the detection of faults by using predictor-based system identification technique. With recursive identification of system model, fault is detected from residual by adaptively setting a threshold. Especially, the predictor-based recursive identification is implemented in a closed-loop setting which is normal for controlling wind turbine systems. The nature of recursive system identification is stochastic, hence, the adaptive threshold is developed in the Chi-squared form. The proposed research is applied to a wind turbine benchmark model to demonstrate its effectiveness.</p>
Date	Tuesday, April 7
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.