

## ABSTRACT

MORAES, C.R.A. *Electronic circuit fault detection using one-class classifiers committee with dimension reduction and dissimilarity representation*. 2017. 232f. Dissertação (Mestrado em Engenharia Eletrônica) – Faculdade de Engenharia, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, 2017.

This work presents an analog and mixed circuits fault detection model, performed by one-class classifiers, as well as data representation by methods of signature extraction, dimension reduction and dissimilarity. This analysis will be performed with different quality metrics in order to verify the best model for different applications.

Keywords: Machine learning; One class classifier; Dimension reduction; Dissimilarity; Attribute extraction; Data representation; Classification.