# MINERAL BOTTLE WASTE IMAGE DETECTION SYSTEM USING THE BACKPROPAGATION METHOD

**AHMAD ROMIZ**

*Informatics Study Program, Faculty of Science & Technology*
*University of Technology Yogyakarta*
*Jl. Ringroad Utara Jombor Sleman Yogyakarta*
*E-mail : ahmadromizmizta02@gmail.com*

## ABSTRACT

*Mineral bottle waste has the potential of recycled material resources if it can be used properly. One of the obstacles faced by the Indonesian people related to this recycling activity is the lack of public awareness to select waste according to its type. this makes the waste not selected properly so that it cannot be processed. Therefore we need a system to detect mineral bottle waste automatically. This research uses the Backpropagation method with RGB features. The bottle waste dataset used was 342 with the distribution of training and testing data of 80%: 20%. In this study, the system process produces an image of mineral bottle waste with the highest accuracy value of 98.6%.*

*Keywords: Mineral Bottle, Image Processing, Machine Learning, Backpropagation.*