

ABSTRACT

The rocks that exist on Earth have many types and various shapes. Due to the large variety of these rocks, it is sometimes difficult to name and identify the type. With a system that can provide clearer information regarding rock names and classifications of rock types, it will be very helpful. Therefore, we need an Artificial Intelligence (AI) technology in the form of an application that can provide information from the name of the rock through a detection system from an image input in the form of an image. Detection of rock types can be done by entering a rock image input using the CNN method with the YOLOv5 algorithm to produce a type classification of the rock. So, a web-based application was made for detecting rock images because later it could help detect rock types quickly and easily online. This application will later provide information related to the rock you are looking for related to the name, type and also information to facilitate learning. From the results of research conducted this system can identify with a value of 69%.

Keywords: *Artificial Intelligence, CNN, YOLOv5*