

**IDENTIFY THE TYPE OF BLOOD WITH USING LDR AND SYSTEM
ALGORITHM BACKPROPAGATION METHOD BASED MICROCONTROLLER
MBED LPC1768 (CORTEX-M3)**

ABSTRACT

LDR (*Light Dependent Resistor*) is a type of resistor whose resistance value is influenced by the light it receives. The value of a drag on the LDR depending on the size of the light received by the LDR. Usually LDR application is widely used as for lighting garden lights and highway lights that can be lit at night and during the day it goes out automatically every day. And the light pattern on the resistance change allows ldr can be used to construct a system pattern identify the type of blood. The type of blood identification tool is designed using a mbed LPC1768 (Cortex-m3), LDR and LED (*Light Emitting Dioda*), as well as using the Backpropagation algorithm method JST system later. While the programming language that used is Matlab and C. As for the success rute of a device is 100% the type of blood A, 75% the type of blood B, 50% the type of blood AB and 100% the type of blood O.

Keywords: LDR (*Light Dependent Resistor*), The type of Blood, Backpropagation, Microcontroller mbed LPC1768 (Cortex-m3).