ABSTRAK

Ega Fransischa, 2022, Prototipe Sistem Peringatan Kebakaran Dini Kebakaran Di Gedung Yayasan Pembinaan Anak Cacat Surabaya Menggunakan Sensor Gas MQ-02 Dan IR Flame Sensor. Skripsi, Program Studi: Teknik Elektro, Universitas PGRI Adi Buana Surabaya, Dosen Pembimbing: Dwi Hastuti, S.Kom, M.T.

Kebakaran gedung adalah peristiwa merusak yang dapat terjadi kapan saja dan tidak dapat diprediksi. Kebakaran itu menyebabkan kerusakan harta benda dan nyawa manusia. Penyebab kebakaran adalah korsleting listrik, kebocoran gas dan kecerobohan manusia. Adapun maksud dan tujuan dari penelitian ini yakni memberikan edukasi terkait pentingnya kesadaran penangangan pertama jika terjadi kebakaran. Namun selama ini kelompok disabilitas tidak sekalipun mendapatkan pelatihan serupa meski dipandang kelompok rentan. Paling tidak, para penyandang disabilitas dapat meminimalkan potensi kebakaran atau menyelamatkan diri saat kebakaran.

Kata Kunci : *Arduino uno,* disabilitas, Sistem Proteksi Kebakaran, Sensor uap dan api

ABSTRACT

Ega Fransischa, 2022, Prototype of Early Fire Warning System in the Surabaya Disabled Children Development Foundation Building Using MQ-02 Gas Sensor and IR Flame Sensor. Thesis, Study Program: Electrical Engineering, PGRI Adi Buana University Surabaya, Supervisor: Dwi Hastuti, S.Kom, M.T.

Building fires are destructive events that can occur at any time and cannot be predicted. The fire causes damage to property and human life. The causes of fires are electrical short circuits, gas leaks and human carelessness. The purpose and objective of this research is to provide education related to the importance of awareness of first aid in the event of a fire. However, so far, groups with disabilities have not even received similar training even though they are considered vulnerable groups. At the very least, people with disabilities can minimize the potential for fire or save themselves during a fire.

Keywords: Arduino uno, disability, Fire Protection System, Vapor and fire sensorxi