ABSTRACT

Along with the development of the digital age, humans can be easy in solving

problems in everyday life. The problem that will be the focus of the author for this

final project is the problem of fire that often on the Book Factory Kiky PT.SOLO

MURNI. On earthquake patches only occur in one warehouse, but the fire if not soon

will spread to other warehouses. Quick handling of fires can prevent more severe

earthquakes. Because it is not resistant to earthquakes in one of the warehouse. In

addition, the precision of firefighters in determining the point of occurrence will be

one of the concerns in the making of the system.

Overcoming the problem, the author makes and creates. Input images from the

camera informed to the controller / Raspberry pi. Raspberry pi will process the image

input as training data by using BackPropagation Neural Network Algorithm. The

results of data processing will be issued information whether there is fire or absence

of fire. If the result of the decision above then there will be information that can be

sent directly to the responsible warehouse and the nearest fire department.

The end result of this study shows that the more sample study will produce

more accurate results. 40x40 pixel architecture is the best size and the smaller the

more it will generate more iterations.

Keywords: Raspberry, Image processing, Camera, Neural Network.