

## Alat Pendeteksi Gempa Bumi Menggunakan Metode Support Vector Machine yang Terintegrasi dengan IoT

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### Abstract

In Indonesia, which is located close to the Pacific Ring of Fire, this area is an area that often occurs in natural disasters, including earthquakes, tsunamis and volcanic eruptions. Research shows there are about 90% of earthquakes that occur, including 81% of the largest earthquakes that occur along this ring of fire. According to research, it is estimated that there are 800 thousand earthquakes that can occur every year and there are around 200 thousand in earthquakes that humans can feel. Due to the frequent occurrence of earthquakes, eventually many casualties, the cause can be fatal due to lack of information about the earthquake so that without realizing that the ruins of buildings or others fall on people who are in the building or house and cannot be helped. Therefore, earthquakes can be detected using an earthquake detector designed with the support vector machine method. As an early sign this detection tool can immediately notify through notifications through devices that have been integrated by the internet of things so that they can be more secure.

**Keywords:** Earthquake detector, support vector machine, internet of things.

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