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## **Metal Detection System**

Lokare A.P., Pratiksha Pandit Birajdar, Supriya Sudhakar Sukane

IT Department

V.A.P.M Almala, Maharashtra, India pratikshabirajdar80@gmail.com and supriyasukane8@gmail.com

Abstract: This project focuses on designing and implementing a metal detector using Arduino Uno. The metal detector circuit consists of an LC circuit, an Arduino microcontroller, and a buzzer/LED indicator to signal metal detection. The project leverages electromagnetic induction principles to detect metallic objects. It is a low-cost and efficient solution for detecting metals in various applications, including security, mining, and archaeology. Metal detectors are widely used in security screening, treasure hunting, and industrial applications. This project aims to develop a simple, efficient, and cost-effective metal detection system using an Arduino Uno microcontroller. The system detects metal objects and triggers an alert using a buzzer and LED indicator.

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