

## Alert-Notification System using Arduino Uno (IA)

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**Imaginative Abstract.** Overheating, voltage regulation failure, arc flash, and shock are all hazards that might result in death or even fire if you are exposed to them. Fortunately, the likelihood of this occurring is extremely remote. This research presents an Arduino-based system for controlling and monitoring electrical devices and sensors remotely for power conservation and protection. Unexpected power failures can result in a power surge, which can harm equipment or electronics while also generating high voltage electricity. A plug remover device is provided in this study, with the goal of controlling and monitoring family consumption via a mobile application or computer. People may stay on top of the information that matters to them thanks to alerting. A notification system is usually used to give alerts. The device is Global System for Mobile communication (GSM) alert notification system-enabled and uses an Arduino Uno and other components to send SMS alert notifications. The research yielded a substantial finding that has a favorable impact on a household's energy consumption rate. furthermore, the device makes an important theoretical contribution by including the environmental concern such as the safety when dealing with electricity.

**Keywords:** GSM alert notification system, Electrical safety, Arduino Uno