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Underground Cable Fault Detection Using IOT

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Abstract: *Underground lines rather than cables are used in this downtown. A fault detection system for underground cable lines built on the Internet of Things makes it relatively simple to identify defects and their locations. With the growth of the electrical system grid, underground cables have been utilized extensively. Due to the underground environment, wear and tear, and rats, underground cables are vulnerable to a wide range of problems. Because the entire line must be dug to check for fault at the cable line, locating the fault site is challenging. Only that area needs to be probed to find the fault's source because the repairmen know exactly which portion is defective. As a result, it helps to service subterranean cable lines more quickly and saves a lot of time and money. We use IOT technology, which enables the government to track and examine issues online. With the use of a potential divider network installed across the cable, the system may identify a fault. According to the resistor network configuration, a specified voltage is produced when a defect occurs in a cable line. The microprocessor detects this voltage, and the user updates it. The user is informed of the distance that that voltage relates to. The microcontroller locates the data from the damaged cable line, displays it on an LCD, and sends it to an online display through the internet.*

Keywords: Arduino, LCD, MCU Wi-Fi Module, IoT (Internet of Things).

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