ArGUS Monitoring Prototype:
A Security Sentry Support

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ABSTRACT
The use of open source hardware development platform such as the Arduino has grown in various application areas in the recent years. Security is an application area where the Arduino platform can be used. An important security aspect is monitoring. This paper intends to explore an alternative open source hardware solution in the development of a prototype of a security monitoring device integrating security measures in terms of intrusion detection, alert notification and remote controlled intervention. Using a thorough review of existing resources, the appropriate resources was identified. The hardware configuration was guided by hardware architecture design and the integration of the resources was guided by a software system model. Five modules were developed to functionally operate the prototype: these are the Intrusion Detection and SMS Notification Module, Camera Streaming Module, Autonomous Patrolling Module, DTMF Controller Module and GSM Controller Module.