ESRG

EMBEDDED SYSTEMS RESEARCH GROUP

University of Minho
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Integrated Master in Industrial Electronics and
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ARGOS

Threat Detection Watchdog Device

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1   Problem Statement

Armed robberies and assaults are a menace to the lives and assets of the victims and require swift action to be resolved.

In those circumstances, the identification and reporting of danger are left, most of the time, at the hands of the endangered. This causes a delay between the threat recognition moment and the moment when authorities take action. This means that any technology that can eliminate that delay might help to save people and property.

In response to that matter, this product aims to help identify and report threats resorting to a weapon recognition system powered by computer vision. Upon detecting a dangerous situation, the device will send useful information like surveillance footage frames, the number of weapons identified, and their position in the environment to a human operator.