

# Ubiquitous Computing asks for Ubiquitous Line of Defense

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**Abstract:** This paper gives an overview of security challenges and approaches for Cyber-Physical Systems (CPS). CPSs are systems, e.g. in industrial or medical environments, which connect physical elements to a public accessible network. By using a wireless communication or internet routes physical fences are not longer a sufficient barrier against malicious users or attackers. Classical approaches like IP-based firewall or Intrusion Detection Systems (IDS) can not be used one-to-one for this class of networks. The limited resources of sensors and actuators as well as real-time requirements ask for new approaches. Furthermore the approaches must run on the node itself due to its unattended operation. This paper discusses very recent approaches towards security in CPSs.