**Improving security of IoT using RIOTSS**

by

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# ABSTRACT

As the Internet of Things grows in demand, various vendors continue to create new devices and products that exchange data and operate remotely. These new products and features may include security risks if not properly mitigated, potentially compromising personally identifiable information. Current literature reveals the need to utilize proper security measures and a process to maintain confidentiality, integrity, and availability to prevent and/or limit malicious actions. If information security is missing any part of the confidentiality, integrity, or availability triad, then the information system or device will not be fully secured. The approach discussed in this research project was to develop a new security framework entitled riskless Internet of Things security standard (RIOTSS). The intended purpose of the RIOTSSis to create a framework based on security standards, industry best practices, policies, and procedures that vendors and manufactures can implement into their production of IoT devices to prevent or limit security weaknesses being introduced into the productions of IoT device products while also offering mitigating procedures that the vendor or manufactures can implemented in a secure manner without restricting device functionality or capability.