**NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL**



**Security Meets Nanoelectronics for Internet of Things Applications**

**Submitted by-**

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**MCA-3rd year**

**HYPOTHESIS AND PROPOSITION OF REPORT**

Nanoscale security primitives are expected to utilize a very small amount of area and consume a negligible amount of power, all while providing the required levels of security.

This paper presents some examples of nanoelectronic security primitives and discusses how such circuits and systems can be of use for inclusion in emerging IoT devices.

IoT devices (e.g., a ﬁtness wristband) are small, wireless and operate using limited battery supply and the technologies used here d pretty justice to the features of IOT.

**METHODS AND TECHNOLOGIES USED**

Schematic of the prposed crossbar-memristive PUF for N configurations and M response bits.

Nanoelectronic technologies for a way to implement small,energy-efficient security mechanisms.

**DRAWBACKS**

Area of utilization should be minimal.

Implementation is limited.

**CHARACTERSTICS OF IOT COVERED**

The main characterstic covered is converting every device to smaller one and energy efficient.

IOT has potential to provide security and this technology does justice to that.