

UNIVERSITY OF SOUTH FLORIDA

Defense of a Master's Thesis

Authentication in Wireless Body Area Networks (WBAN)

by

Nagalaxmi Yenuganti

For the MSCS degree in Computer Science & Engineering

The primary concern of wireless sensors is sensor authentication, which ensures trustworthiness and reliable gathering of a user's data. To address this concern, we designed a secure approach using low cost accelerometers to authenticate sensors in On-body sensor networks. To ensure authentication, we need a mechanism which intuitively proves all the communicating nodes are trusted ones and are carried by the same person. We used accelerometer data gathered from sensors to distinguish whether or not the devices are carried on same individual's body. Our approach is focused at analyzing walking patterns recorded from smartphone accelerometers carried by an individual, and we present results showing these, sensors record similar patterns.

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3:00 PM

ENB 313

THE PUBLIC IS INVITED

Examining Committee

Dr. Yao Liu, Ph.D., Major Professor

Dr. Jay Ligatti, Ph.D.

Dr. Yicheng Tu, Ph.D.

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Dean, College of Engineering*

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