

UNIVERSITY OF SOUTH FLORIDA

Defense of a Master's Thesis

*Experimental Analysis on the Feasibility of Voice Based Symmetric Key
Generation for Embedded Devices*

by

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For the MSCS degree in Computer Science & Engineering

We present results of an experimental study in order to generate a secure cryptographic key from the user's voice which is to be shared between two mobile devices. We identified two security threats related to this problem, discussed the challenges to design the key generation/ sharing mechanism, and proposed a new protocol based on bloom filters that overcomes the two main attacks by the intruder. We present several results that demonstrate the practicality of our proposed technique in the context of communications between smart-phones.

Tuesday, May 2, 2017

1:00 PM

ENB 337

THE PUBLIC IS INVITED

Examining Committee

Sriram Chellappan, Ph.D., Major Professor

Srinivas Katkoori, Ph.D.

Ravi Sankar, Ph.D.

*Robert Bishop, Ph.D.
Dean, College of Engineering*

*Dwayne Smith, Ph.D.
Dean, Office of Graduate Studies*

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