UNIVERSITY OF SOUTH FLORIDA

Defense of a Doctoral Dissertation

A Quantified Model of Security Policies, with an Application for Injection-Attack Prevention

by

Donald Ray

For the Ph.D. degree in Computer Science & Engineering

This dissertation generalizes traditional models of security policies, from specifications of whether *programs are secure, to specifications of* how *secure programs are. It is argued that the generalization provides several benefits, including that it serves as a unifying framework for disparate approaches to security metrics, and that it separates—in a practically useful way—specifications of how secure systems are from specifications of how secure users require their systems to be. To demonstrate the usefulness of the new model, policies for mitigating injection attacks (including both code- and noncode-injection attacks) are explored.*

March 25, 2016

10:00 AM

ENC 3408

THE PUBLIC IS INVITED

Examining Committee

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