### HERNAN M. PALOMBO

(850) 316-0559 hernanpalombo@gmail.com http://linkedin.com/in/hernanpalombo 13201 National Dr. Apt. B Tampa, FL 33617

### **EDUCATION**

- Ph.D. C.S., University of South Florida, Co-advised by Dr. Hao Zheng and Dr. Jay Ligatti expected 8/2018

- M.S. C.S., University of South Florida, 3.9 GPA 10/2015

- B.S. C.S., University of West Florida, 3.8 GPA (Magna Cum Laude) 8/2010

### **EXPERIENCE**

Ph.D. Research

8/2013 - Present (4 years)

University of South Florida, Tampa, FL

My research is focused on applying formal methods to design and implement systems that precisely enforce security policies.

# Projects/Publications:

- Runtime Monitors for Distributed Systems. In Progress.
- Towards Precise and Automated Verification of Security Protocols in Coq. Accepted to CCS'17.
- A Post-Silicon Trace Analysis Approach for System-on-Chip Protocol Debug. Accepted to ICCD'17.
- A Comparative Study of Formal Verification Techniques for Authentication Protocols. Master's Thesis. USF, 2015.
- Verification of a Vehicle Authentication Protocol. Technical Report. USF, 2015.
- OpenID Connect: Formal Analysis, Verification and Attacks Classification. Technical Report. USF, 2014.
- Model Checking Memory Consistency and Cache Coherence. Technical Report. USF, 2013.

# Instruction

8/2013 - Present (4 years)

University of South Florida, Tampa, FL

- Developed an ability to analyze technical problems, communicate abstract ideas, and implement working solutions under the scrutiny of students and professors.
- Responsible for creating course content, delivering lectures, tutoring sessions, taking examinations and grading projects.
- Mastered time-management skills in the ever-changing and results-driven teaching and research environments.

## Courses Taught:

- Computer Logic Design, Su-2015
- Data Structures, Sp-2015
- Computer Logic Design Lab, Su-2014, F-2017

# Assistantships:

- Program Design, Su-2017
- Cyber-Physical Systems, (Grad) Sp-2017
- Embedded Systems, (Grad) F-2016
- Operating Systems, (Grad) Sp-2016, F-2015/4
- FPGA Design (Grad), F-2015
- Computer Organization, Sp-2014/3

# Software Engineer

Milsoft, Pensacola, FL

1/2011 - 8/2013 (2 years 8 months)

- Developed a unified communications server –written mostly in Java, C++, and Javascript– for automated call centers that served millions of customers through hundreds of utility companies and service providers throughout the US and the Caribbean.

- Wrote code for every layer of the system, from rich user interfaces to lower-level scripts for automation of server administration tasks.
- Designed and implemented several Java APIs for integration with existing middleware, speech synthesis and voice recognition engines.
- Reviewed other programmers code and advised modifications based on customers requests.
- Created an in-house penetration test environment and implemented PCI security compliance and system hardening for processing credit card payments.

# Software Engineer Intern

1/2011 - 4/2011 (4 months)

Caliber Public Safety, Pensacola, FL

- Developed a code analysis C# library for automated testing.
- Coded batch database processing tool in C#.

# Programmer, Web Developer

12/2006 - 12/2010 (4 years)

University of West Florida, Pensacola, FL

- Developed a course management system for the CS Department.
- Created the admissions application and career plan database for graduate SE program.
- Implemented a LAMP web application with a SOAP interface for graduate software engineering instruction.
- Tutored students in Java and C, SQL, networks, data structures, and algorithms.
- Maintained websites and online applications for programs in 7 different departments within the University.

### References

Available upon request.