Curriculum Vitae/Resume

Meng Wu

4th Year Ph.D. Student
Computer Engineering, Virginia Tech
339 Salvatori Computer Science Center 941 Bloom Walk, Los Angeles, CA 90089
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Education

2014 – Present: Ph.D. in Computer Engineering, Virginia Tech, USA
GPA: **3.9/4.0**   Research Interest: Formal Verification, Program Synthesis, Side Channel Attack
2008 – 2012:   B.S. in Electric Power Engineering and Automation, Shanghai Jiao Tong University(SJTU), CHINA

Research Experience

2017 – Present: **Department of Computer Science, University of Southern California**
Visiting PhD Student   Advised by: Professor Chao Wang
2014 – Present: **Center for Embedded Systems for Critical Applications (CESCA), Virginia Tech**
Research Assistant   Advised by: Professor Chao Wang
Program Repair for Eliminating Timing Side-channel Leaks
A compiler framework that automatically translate safety critical application with sensitive variables to cache side channel attack resistant application
Symbolic Execution for Programmable Logic Controller Code
Synthesizing Runtime Enforcer of Safety Specification
2011 – 2012: **Department of Electrical Engineering, SJTU**
Thesis: *Research and Development of a Motor Control Platform for Education*
2011 – 2012: **Department of Electrical Engineering, SJTU**
Research Assistant   SJTU-Freescale Joint Laboratory
2011: **Participation in Research Program for Undergraduates, SJTU**
Project Leader   SJTU-Schneider Joint Laboratory

Publication

[ISSTA 18'] **Meng Wu**, Shengjian Guo, Patrick Schaumont, and Chao Wang, "Eliminating timing side-channel leaks using program repair"
[DAC 17'] **Meng Wu**, Haibo Zeng, Chao Wang, "Auto Safety Guards: Reactive Synthesis for Protecting Safety-Critical Automotive Systems"
[NFM 16'] **Meng Wu**, Haibo Zeng, Chao Wang, "Synthesizing Runtime Enforcer of Safety Specification under Burst Error"
[FSE 17'] Shengjian Guo, **Meng Wu**, and Chao Wang, "Symbolic Execution of Programmable Logic Controller Code"
[CAV 16'] Hassan Eldib, **Meng Wu**, Chao Wang, "Synthesis of Fault-Attack Countermeasures for Cryptographic Circuits"

Teaching Experience

2014: **Department of Electrical and Computer Engineering, Virginia Tech**
Teaching Assistant   Open Electronics Lab
2012: **Department of Electrical Engineering, SJTU**
Teaching Assistant   Laboratory Experiment of Motor Control

Work Experience

2016/05 – 2016/08: **Microsoft Research Asia, Beijing, CHINA**
Research Intern   Software Analytics Group
2012 – 2014: **Envision Energy Limited, Shanghai, CHINA**
Firmware Engineer   R&D Department

Specialties

Programing languages (C/C++, Python, C#)
LLVM compiler, SMT solver (Z3, Yices), BDD solver(CUDD)