Tang Guojun

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Github: https://github.com/guojuntang

EDUCATION

Network Engineering, Bachelor

South China Normal University, China — 2015-2019

Supervisor: Dr. Zheng Gong

Computer Science, Master

University of New Brunswick, Canada — 2021-2022

Supervisor: Dr. Rongxing Lu

TEACHING EXPERIENCE

Teaching Assistant

School Of Computer, South China Normal University — 2018

• Tutored Students to finish Lab assignments in Computer Security Course.

RESEARCH EXPERIENCE

Research Assistant

School Of Computer, South China Normal University – 2018-2019

- Assistant to Professor Gong Zheng, conducting research about Block Cipher and Mobile Device Security.
- Participating in Block Cipher Design entitled SWAN Cipher.
- Organised patent entitled "Feistel Structure Based Construction Of White Box Cryptography"

Student Program

Digital Technologies Research Centre, National Research Council of Canada (NRC) – 2022.I -2022.4

- Conduct the research on WeightedSim (See the publication below, supervisor: Dr. Mohammad Mamun).
- Present the research at the end of the program.

PROFESSIONAL EXPERIENCE

PHP Engineer(intern)

Guangzhou 49You Co.,Ltd. — 2018

• maintained Game Service System(Website) for the company, using ThinkPHP and Jquery.

Project Member

South China Normal University and Aisino Co.Ltd. — 2018-2019

- Maintained a Cryptography library and test some module of it.
- Completed a Cryptography library based on OP-TEE.

Participant of SWAN Cipher

South China Normal University ,National University of Defense Technology and Institute of Information Engineering Chinese Academy of Sciences — 2018-2019

- Completed the block cipher algorithm in C and Verilog(software and hardware).
- Optimised the software implementation.
- Analysed the hardware implementation by Synopsis Design Compiler.
- Gave little suggestion on the algorithm.
- Test the algorithm in different platform(Win and Ubuntu).

Member of Network Security Team

Network Centre, South China Normal University — 2016-2018

- Checked and found the vulnerabilities and exposures of websites among the college.
- Participated in CTF(competition about information security).

TECHNICAL SKILLS

Program Languages:

C/C++, Java, Python, Javascript, Verilog

Web Design:

Front-end framework: Jquery, Vue.js, iView(UI library for Vue.js)

Back-end framework: ThinkPHP, Laravel(PHP framework), Express(Web framework for Node.js)

HONORS AND AWARDS

Programming Contest:

Successful Participant, The 15th Guangdong Collegiate Programming Contest. — 2017 Honorable Mention, The 3rd China Collegiate Programming Contest(Harbin) — 2017

Information Security:

Certificate Of National Information Security Test Program(Level 1) — 2018

Information Security/CTF:

Second Prize Of South China Group, National University Information Security Management Operation and Maintenance — 2017

Second Prize Of South China Group, National University Information Security Management Operation and Maintenance — 2016

Second Prize, Information Security Triathlon — 2018

Third Place, Red Hat Cup(Guangdong Network Security Competition) — 2017

Information Security/Cryptography:

Second Prize, National Cryptography Competition — 2018

GRANTS AWARDED

Innovation Grant, School Of Computer, South China Normal University – 2016

PUBLICATIONS

Feistel Structure Based Construction Of White Box Cryptography (Patent Number: 201910264826.1) Tang Guojun, Le Qiwen, Li Weijie, Sun Tao, Gong Zheng SWAN Cipher (2019, March 3rd, Document: http://sfjs.cacrnet.org.cn/site/content/397.html) Tang Guojun, Gong Zheng, Li Weijie, Sun Tao, Xu Zhaoji, Sun Bin, Sun Siwei, Zhang Yingjie A Noisy Rounds-based White-box AES Implementation and Corresponding Differential Fault Analysis. SUN T, TANG G J, WU X K, MAO Z N, GONG Z. Journal of Cryptologic Research, 2020, 7(3): 342-357.

UNIVERSITY SERVICE

President Of Students Association

South China Normal University

- Joined Network Association at 2015, and became the president of it at 2018.
- Managed the operation of the association.
- Organised Information Security Competition(CTF) in college.
- Tutored association members how to build up their own websites (including websites' frontend and backend).