

Kaixin Yang

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Education

Viterbi School of Electrical and Computer Engineering, University of Southern California

Los Angeles, CA 90007, U.S.

Sept.2019 – Present

Ph.D. in Computer Engineering

School of Electronics Engineering and Computer Science, Peking University

Beijing, China

Sept.2015 – Jul.2019

B.S. in Electronic and Information Science and Technology

Anqing No.1 Middle School, Anqing, Anhui, China

Sept.2012 – Jul.2015

High School

Anqing Foreign Language School, Anqing, Anhui, China

Sept.2009 – Jul.2012

Middle School

Research Experience

Research on Hardware Security and Sequential Logic Encryption

Aug.2019 – Present

Advisor: Prof. Nuzzo

Affiliation: Cyber-Physical System Design Group

- Systematically summarized the assumptions and metrics of current sequential logic attack methods.

Research on Satellite Communication System and Network

Oct.2017 – Jun.2019

Advisor: Prof. Na Yi

Affiliation: Institute of Advanced Communications

- Did a literature review for distributed relational databases, learned the principles and advantages of developing them systematically, and examined the feasibility of highly-reliable distributed relational databases by using Tencent's PhxSQL as an experimental example.
- Helped design a distributed storage scheme for the satellite communication system and simulate satellite communication channel.
- Exploring the way to implement applications on the GPU platform with OpenCL.

Publication

Y. Hu, K. Yang, S. Nazarian, P. Nuzzo. SANS-Crypt: A Sporadic-Authentication-Based Sequential Logic Encryption Scheme. *Submitted.*

Contest

Intel Cup Undergraduate Electronic Design Contest

Apr.2017 – Jul.2018

Third Prize

- Designed *Lost and Found Cabinet with Personal Information Protection* based on Intel embedded platform called *UP² Board*, which aimed at facilitating retrieving the lost property.
- Established the database of the system and implemented the Web server based on Flask framework.

Honor and Award

- 2019 Annenberg Fellowship
- 2018 Excellent Presentation in The Sixth Peking University Young Scientists Symposium on Informatics
- 2018 Third Prize in 2018 Intel Cup Undergraduate Electronic Design Contest
- 2017 Award for Academic Excellence of Peking University in academic year
- 2017 Level 3 in National Computer Rank Examination
- 2016 First Prize in College Physics Contest awarded by Beijing Physics Society in year 2016

Campus Experience

Piano Association of Peking University Mar.2017 – Jun.2019

Member of Publicity Department Designed posters and edited essays.

Student Affairs Office, EECS, Peking University Mar.2016 – Jul.2018

Student Assistant Dealt with daily affairs of EECS undergraduate students.

Skill

Programming Language: C++, C, Python, MASM, C51, OpenCL C, SQL, Verilog

Software & platform: MATLAB, Cadence, LaTeX, TensorFlow, Linux

Language: Chinese(Native), English(Proficient)

Standard English Test: TOEFL 102 (R27, S27, L20, W28); GRE 323 (V153, Q170, W3.5)

Miscellaneous

Hobby: Photograph, Photoshop, piano, soccer, basketball

Blog: <https://sceneryinmirror.github.io>