# **Li-Hsiang Kuo**

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Madison, WI 53706, USA

## **EDUCATION**

## University of Wisconsin-Madison, Madison, WI

M.S. in Computer Sciences, May 2013

### National Taiwan University, Taipei, Taiwan

**B.S.** in Computer Science and Information Engineering, June 2007

#### **EXPERIENCE**

#### AT&T Labs-Research, Florham Park, NJ

Full-time Intern, May 2012-August 2012

- Analyzed data collected from social network to improve customer experiences.
- Built anomaly event detection system based on social network data.

#### University of Wisconsin-Madison, Madison, WI

**Teaching Assistant, January 2012-May 2013** 

- Led lab discussions, grade homework and exams for an undergraduate programming course "CS 302: Introduction to Programming."
- Provided lab consulting, grade homework and exams for an undergraduate programming course
  "CS 367: Introduction to Data Structures."

## CyLab, Carnegie Mellon University, Pittsburgh, PA

Exchange Scholar, February-May 2009, October-December 2009

- Collaborated with Prof. Adrian Perrig's Security research group.
- Designed SPATE, a protocol allows users to establish trusted interactions in small groups via mobile devices.
- Implemented SPATE on Nokia smartphones to support secure email, file-sharing and encrypted text message services.

# Institute of Information Science, Academia Sinica, Taipei, Taiwan

Research Assistant, June 2008-February 2010

- Worked in Prof. Bo-Yin Yang's Fast Crypto research group.
- Designed and implemented several Multivariate Public Key Cryptosystems (MPKCs) using x86 CPUs and general purpose GPUs.

### **PUBLICATIONS**

- 1. J.J. De Simone, **L.-H. Kuo**, T. Verbruggen, and B. Mutlu, *Is Cheating a Human Function? The Roles of Presence, State Hostility, and Enjoyment in an Unfair Video Game*, Computers in Human Behavior, 28:6(2012), pp. 2351-2358.
- Y.-H. Lin, A. Studer, Y.-H. Chen, H.-C. Hsiao, L.-H. Kuo, J. Lee, J. McCune, K.-H. Wang, M. Krohn, A. Perrig, B.-Y. Yang, H.-M. Sun, and P.-L. Lin, SPATE: Small-group PKI-less Authenticated Trust Establishment, IEEE Trans on Mobile Computing 9:12(2010), pp. 1666-1681.
- 3. A. I.-T. Chen, M.-S. Chen, T.-R. Chen, C.-M. Cheng, J. Ding, **L.-H. Kuo**, F. Y.-S. Lee, and B.-Y. Yang, *SSE Implementation of Multivariate PKCs on Modern x86 CPUs*, CHES 2009, pp. 33-48, LNCS 5747.

## **OTHER GRADUATE PROJECTS**

- Designed and implemented LaPad, an SDN-based secure location-aware pseudo addressing in the cloud network.
  - (http://pages.cs.wisc.edu/~lorderic/webpage/LaPad.pdf)
- Developed On Wisconsin, a location-based social event service for mobile devices.
  Implemented on Android smartphones.
  - (http://pages.cs.wisc.edu/~lorderic/webpage/onWisconsin.pdf)
- Designed a content-based access control system to manage multimedia data in home networks.
  Implemented using Microsoft's HomeOS platform.
  - (http://research.microsoft.com/en-us/um/redmond/projects/homeos/homeos-demos.htm #6)
- Studied credit card number tokenization vulnerabilities, and provided possible attacks against real world systems.
  - (http://pages.cs.wisc.edu/~lorderic/webpage/tokenization-crack.pdf)

#### **SKILLS**

Programming Languages: Proficient in C/C++, C#, Java. Experienced in Perl, Python, SQL. Operating Systems: Windows, Linux.

#### **INTERESTS**

Research: Computer and mobile networking, network measurement, security and applied cryptography. Other: Playing bridge, and more bridge.