# Yi Qian

3270 A.V. Williams
University of Maryland
College Park, MD 20740

mobile: (518)522-7333
email: yiqian@cs.umd.edu

| RESEARCH INTERESTS | Security and Applied Cryptology<br>Social Networking | |
|---|---|---|

| EDUCATION | *Ph.D.*, Computer Science    Advisor: Charalampos Papamanthou<br>University of Maryland, College Park, MD | Expected May 2017<br>GPA: 3.93/4.0 |
|---|---|---|
| | *M.S.*, Computer Science    Advisor: Sibel Adali<br>RPI, Troy, NY | May 2013<br>GPA: 3.88/4.0 |
| | *B.E. with Honor*, Electrical Engineering<br>Elite Class of Electrical Engineering (Chien-Shiung Wu College)<br>Southeast University, Nanjing, China | June 2010<br><br>GPA: 3.7/4.0 |

**TEACHING & RESEARCH**

**Research Assistant**    Department of Computer Science, UMD    Mar. 2014 – Present
*Differentially Private Streaming Mechanism*

*Abstraction of Streaming Authenticated Data Structures*
• Proposed an abstract construction and developed a practical implementation of the scheme

**Teaching Assistant**    Department of Computer Science, UMD    Sept. 2013 – Sept. 2014
*Discrete Structure*
• Gave lectures, led discussions on problem solvings and graded quizzes weekly

**Research Assistant**    Department of Computer Science, RPI    Sept. 2010 – May 2013
*General Triadic Balance and Convergence Model in Social Networks*
• Proposed an extended balance theory in social networks
• Proved some well-observed social network properties under the theory
• Justified the theory in predicting edge signs on Epinions, Slashdot and Wikipedia datasets

*Provenance based Trust Reasoning*
• Proposed a provenance based trust reasoning mechanism

**Teaching Assistant**    Department of Computer Science, RPI    Spring 2012, Spring 2013
*Computer Algorithm, Foundation of Computer Science*

**PUBLICATIONS**

Streaming Authenticated Data Structures: Abstraction and Implementation. *CCSW 2014*, to be appear.

Foundations of Trust and Distrust in Networks: Extended Structural Balance Theory. *ACM Transactions on the Web (TWEB)*, Volume 8 Issue 3, June 2014.

Extended Structural Balance Theory for Modeling Trust in Social Networks. *Eleventh International Conference on Privacy, Security and Trust*, Spain. 2013.

Extended Balance Theory and Convergence Model in Social Networks. *Master Thesis*, RPI, Troy NY. 2013.

A Unified Framework for Trust in Composite Networks. *Proceedings of 14th International Workshop on Trust in Agent*, Tapei, Taiwan. 2011.

| HONOURS AND AWARDS | Dean Fellowship, University of Maryland College Park<br>Outstanding Undergraduate Thesis Award, Southeast University<br>University-level Scholarships, , Southeast University | Sept. 2013-Sept. 2014<br>July 2010<br>Sept. 2006-July 2010 |
|---|---|---|

| ACTIVITIES | *6th Sino-Singapore Undergraduate Exchange*, Singapore City<br>*IOSTE Regional Symposium on Science Education*, University of Philippines, Philippines | Mar. 2009<br>July 2007 |
|---|---|---|

| SKILLS | Java, Python, C, C++, Ruby, OCaml, Prolog, Matlab, Linux shell scripting, LaTeX 2$_\varepsilon$. | |
|---|---|---|