

Youzhi (Tiffany) Bao

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INFORMATION Arizona State University
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EDUCATION **Doctor of Philosophy , Carnegie Mellon University** 2012 – 2018
Department of Electrical and Computer Engineering

Bachelor of Science, Peking University 2008 – 2012
School of Electrical Engineering & Computer Science
Department of Computer Science

- PUBLICATIONS
1. Your Exploit is Mine: Automatic Shellcode Transplant for Remote Exploits.
Tiffany Bao, Ruoyu Wang, Yan Shoshitaishvili, and David Brumley.
In Proceedings of the 38th IEEE Symposium on Security and Privacy (Oakland '17).
 2. How Shall We Play a Game: A Game-theoretical Model for Cyber-warfare.
Tiffany Bao, Yan Shoshitaishvili, Ruoyu Wang, Christopher Kruegel, Giovanni Vigna and David Brumley.
In Proceedings of the 30th IEEE Computer Security Foundations (CSF '17).
 3. Security is a Game.
Tiffany Bao.
In 2017 USENIX Summit on Hot Topics in Security (HotSec '17).
 4. Efficient Crash Triage with Black-box Dependency Inference.
Tiffany Bao, Thanassis Avgerinos, Gustavo Grieco and David Brumley.
Submitted for publication.
 5. Primus: Memory Check with Micro Execution.
Ivan Gotovchits, **Tiffany Bao** and David Brumley.
Submitted for publication.
 6. Does IT Make us Secure: A Qualitative Evaluation for Binary Analysis.

Tiffany Bao and David Brumley.

To be submitted.

7. A Game-theoretical Model for Cyber-warfare Games. (Invited Poster)

Tiffany Bao, Yan Shoshitaishvili, Ruoyu Wang and David Brumley.

In *the 8th Workshop on Computational Cybersecurity in Compromised Environments (C3E '16)*.

8. ByteWeight: Learning to Recognize Functions in Binary Code.

Tiffany Bao, Jonathan Burket, Maverick Woo, Rafael Turner, and David Brumley.

In *Proceedings of the 23rd USENIX Security Symposium (USENIX '14)*.

9. Type-based Dynamic Taint Analysis Technology.

Libo Chen, Jianwei Zhuge, Fan Tian, **Tiffany Bao**, and Xun Lu. In *Tsinghua Science and Technology Journal*, 2012.

10. Research of Technology for Type-based Dynamic Taint Analysis.

Libo Chen, Jianwei Zhuge, Fan Tian, **Tiffany Bao**, and Xun Lu. In *Proceedings of the 5th Conference of Vulnerability Analysis and Risk Assessment (VARA '12)*.

Outstanding Paper Award.

INVITED TALKS	Artificial Intelligence in Cyber Security: Technology and Strategy. The 5th China Internet Security Conference (ISC).	2017
	Artificial Intelligence in Cyber Security: Technology and Strategy. International Forum For Security Research (InForSec).	2017
	Artificial Intelligence in Cyber Security: Technology and Strategy. Peking University.	2017
	Exploit Techniques and Strategies. CMU CyLab Partners Conference.	2017
	ShellSwap: Automatic Shellcode Transplant for Remote Exploits. Baidu Bay Area Security Forum (BASec).	2017

PROFESSIONAL ACTIVITIES	Program Committee Member.	
	Workshop on Binary Analysis Research.	2018
	Affiliated with the Network and Distributed System Security Symposium.	
	Student Committee Member.	
	IEEE Symposium on Security and Privacy (Oakland).	2016
	External Reviewer.	
	The Network and Distributed System Security Symposium.	2014
	The ACM Conference on Computer and Communications Security.	2013
	Mentor.	
	Google Summer of Code.	2013
SELECTED AWARDS AND HONORS	Contributor.	
	<i>Introduction to Algorithm and Olympiad in Informatics.</i>	2011
	ISBN:9787302291077	
	<i>Network Hacking and Defense.</i>	2010
	ISBN: 9787121138027	
	Awarded Talk at 2017 USENIX Summit on Hot Topics in Security.	2017
	Carnegie Mellon University Presidential Fellowship.	2017
	Second Place at EFF Capture the Flag @ Enigma.	2016
	Frank J. Marshall Graduate Fellowship.	2012
	Zongjie Huo Fellowship.	2008, 2009
TEACHING EXPERIENCE	First Prize in Chinese Computing Olympiad, Province Tianjin. Top Female in 2006.	2006, 2007
	Second Prize in Chinese Mathematical Olympiad, Province Tianjin.	2007
	Head Teaching Assistant.	
	Network Security. (CMU 18-731, for Graduate)	2015

Head Teaching Assistant.

Introduction to Computer Security. (CMU 18-487, for Undergraduate) 2016

Instructor for Computing Olympiad. 2008

PROFESSIONAL Research Internship, University of California Santa Barbara. 2016
EXPERIENCE

Research Internship, Tsinghua University. 2012

Member, the Blue-Lotus Hacking Team. 2012

Member, the HoneyNet Project. 2011-2013

Research Assistant, Peking University. 2010-2012