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|  |  | Tiffany Bao  5608 Beacon Street Apartment 1, Pittsburgh, PA 15217 T: 412-254-4744 E: tiffanybao@cmu.edu |
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| Education |  | Ph.D. Candidate, Carnegie Mellon University 2012 – present  Department of Electrical and Computer Engineering  Advisor: Professor David Brumley  Bachelor of Science, Peking University 2008 – 2012  School of Electrical Engineering & Computer Science  Department of Computer Science |
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| 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).   1. 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).   1. Security is a Game.   **Tiffany Bao.**  In 2017 USENIX Summit on Hot Topics in Security (HotSec ’17).   1. Efficient Crash Triage with Black-box Dependency Inference.   **Tiffany Bao**, Thanassis Avgerinos, Gustavo Grieco and David Brumley.  Submitted for publication.   1. Primus: Memory Check with Micro Execution.   Ivan Gotovchits, **Tiffany Bao** and David Brumley.  Submitted for publication.   1. Does IT Make us Secure: A Qualitative Evaluation for Binary Analysis.   **Tiffany Bao** and David Brumley.  To be submitted.   1. 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).   1. 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).   1. Type-based Dynamic Taint Analysis Technology.   Libo Chen, Jianwei Zhuge, Fan Tian, **Tiffany Bao**, and Xun Lu.  In Tsinghua Science and Technology Journal, 2012.   1. 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 |  | Lorem ipsum dolorArtificial Intelligence in Cyber Security: Technology and Strategy. 2017 The 5th China Internet Security Conference (ISC). Artificial Intelligence in Cyber Security: Technology and Strategy. 2017 International Forum for Security Research (InForSec). Artificial Intelligence in Cyber Security: Technology and Strategy. 2017 Peking University. Exploit Techniques and Strategies. 2017 CMU CyLab Partners Conference. ShellSwap: Automatic Shellcode Transplant for Remote Exploits 2017 Baidu Bay Area Security Forum (BASec). |
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| 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 Reviwer.**The Network and Distributed System Security Symposium. 2014The ACM Conference on Computer and Communications Security. 2013**Mentor.**Google Summer of Code. 2013**Contributor**.Introduction to Algorithm and Olympiad in Informatics. 2011 ISBN:9787302291077 Network Hacking and Defense. 2010 ISBN: 9787121138027 |
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| Selected Awards and Honors |  | Awarded Talk at 2017 USENIX Summit on Hot Topics in Security. 2017Carnegie Mellon University Presidential Fellowship. 2017Second Place at EFF Capture the Flag @ Enigma. 2016Frank J. Marshall Graduate Fellowship. 2012Zongjie Huo Fellowship. 2008, 2009First Prize in Chinese Computing Olympiad, Province Tianjin. 2006, 2007 Top Female in 2006. Second Prize in Chinese Mathematical Olympiad, Province Tianjin. 2007 |
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| Teaching Experience |  | **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 |
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| Professional Experience |  | Research Internship, University of California Santa Barbara. 2016Research Internship, Tsinghua University. 2012Member, the Blue-Lotus Hacking Team. 2012Member, the Honeynet Project. 2011-2013Research Assistant, Peking University. 2010-2012 |
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| References |  | **Professor David Brumley** Carnegie Mellon University (412) 268-3851  dbrumley@cmu.edu **Professor Giovanni Vigna**University of California, Santa Barbara (805) 637-6382  vigna@cs.ucsb.edu **Professor Wenke Lee**Georgia Institute of Technology (404) 385-2879  wenke.lee@gmail.com |