Dongdong She

Room 406, Data Science Institute

Columbia University, New York, NY 10027

Email: dongdong@cs.columbia.edu

Phone: 1-951-367-7692

Research Interests

Fuzzing, program analysis, machine learning, applied machine learning on security

Education

Ph.D in Computer Science,   **Sep 2017 - Sep 2022**

Columbia University, New York, New York

Advisor: Dr. Suman Jana, Dr. Baishakhi Ray

M.S in Computer Science,   **Sep 2015 - June 2017**
University of California Riverside, Riverside, California

Advisor: Dr. Zhiyun Qian

B.E in Electronic & Information Engineering,   **Sep 2011 - June 2015**
Huazhong University of Science and Technology, Wuhan, China

Publications

Effective Seed Scheduling for Fuzzing with Graph Centrality Analysis.

Dongdong She, Abhishek Shah, Suman Jana

In Proceedings of the 43rd IEEE Symposium on Security & Privacy (S&P) 2022, Oakland, CA.

Fine Grained Dataflow Tracking with Proximal Gradients.

Gabriel Ryan, Abhishek Shah, **Dongdong She**, Koustubha Bhat, and Suman Jana.

In proceedings of the 30th USENIX Security Symposium (Security) 2021.

MTFuzz: Fuzzing with a Multi-Task Neural Network.

Dongdong She, Rahul Krishna, Lu Yan Suman Jana and Baishakhi Ray

In Proceedings of the 28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) 2020, Sacramento, CA.

On Training Robust PDF Malware Classifiers.

Yizheng Chen, Shiqi Wang, **Dongdong She**, and Suman Jana

In proceedings of the 29th USENIX Security Symposium (Security) 2020, Boston, MA.

Neutaint: Efficient Dynamic Taint Analysis with Neural Networks.

Dongdong She, Yizheng Chen, Abhishek Shah, Baishakhi Ray and Suman Jana

In Proceedings of the 41st IEEE Symposium on Security & Privacy (S&P) 2020, Oakland, CA.

NEUZZ: Efficient Fuzzing with Neural Program Smoothing.

Dongdong She, Kexin Pei, Dave Epstein, Junfeng Yang, Baishakhi Ray and Suman Jana

In Proceedings of the IEEE Symposium on Security & Privacy (S&P) 2019, Oakland, CA.

Top 10 Finalist in 2019 NYU CSAW Applied Research Competition

Android ION Hazard: the Curse of Customizable Memory Management System.

Hang Zhang, **Dongdong She**, Zhiyun Qian

In Proceedings of ACM Conference on Computer and Communications Security (CCS) 2016, Vienna, Austria.

Android Root and its Providers: A Double-Edged Sword

Hang Zhang, **Dongdong She**, Zhiyun Qian

In Proceedings of ACM Conference on Computer and Communications Security (CCS) 2015, Denver, CO.

Working Experience

Research Intern @ IBM Research, Cyber Security Intelligence Team   **June 2020 - Sep 2020**