

NSF BIOGRAPHICAL SKETCH

Provide the following information for the Senior personnel.
Follow this format for each person. **DO NOT EXCEED 3 PAGES.**

IDENTIFYING INFORMATION:

NAME: Ji, Yuede

ORCID: 0000-0002-2419-6592

POSITION TITLE: Assistant Professor

ORGANIZATION AND LOCATION: University of North Texas, Denton, TX, United States**Professional Preparation:**

ORGANIZATION AND LOCATION	DEGREE (if applicable)	DATE RECEIVED	FIELD OF STUDY
The George Washington University, Washington, DC, United States	PHD	2021	Computer Engineering
Jilin University, Changchun, Jilin, China	MS	2015	Computer Science
Jilin University, Changchun, Jilin, China	BENG	2012	Software Engineering

Appointments and Positions

2021 - present Assistant Professor, University of North Texas, Denton, TX, United States
 2020 - 2020 Senior Intern, Kryptowire LLC, McLean, VA, United States
 2017 - 2018 Graduate Student Intern, George Washington University, Division of Information
 Technology, Washington, DC, United States
 2015 - 2021 Research/Teaching Assistant, George Washington University, Washington, DC,
 United States

Products**Products Most Closely Related to the Proposed Project**

1. Fu Q, Ji Y, Huang H. TLPGNN: A Lightweight Two-Level Parallelism Paradigm for Graph Neural Network Computation on GPU. the 31st International Symposium on High-Performance Parallel and Distributed Computing (HPDC); 2022 June 27.
2. Ji Yuede, Elsabagh Mohamed, Johnson Ryan, Stavrou Angelos. DEFInit: An Analysis of Exposed Android Init Routines. 30th USENIX Security Symposium (USENIX Security 21); 2021; c2021.
3. Ji Yuede, Cui Lei, Huang H. Howie. BugGraph: Differentiating Source-Binary Code Similarity with Graph Triplet-Loss Network. 16th ACM ASIA Conference on Computer and Communications Security (ASIACCS); 2021; c2021.
4. Ji Yuede, Liu Hang, Huang H. Howie. ispan: Parallel identification of strongly connected components with spanning trees. International Conference for High Performance Computing,

Networking, Storage and Analysis (SC); 2018; c2018.

5. Ji Yuede, Cui Lei, Huang H Howie. Vestige: Identifying Binary Code Provenance for Vulnerability Detection. International Conference on Applied Cryptography and Network Security; 2021; c2021.

Other Significant Products, Whether or Not Related to the Proposed Project

1. Ji Y, Huang H. NestedGNN: Detecting Malicious Network Activity with Nested Graph Neural Networks. IEEE International Conference on Communications (ICC); 2022 May 16; Seoul, South Korea.
2. He H, Ji Y, Huang H. Illuminati: Towards Explaining Graph Neural Networks for Cybersecurity Analysis. 7th IEEE European Symposium on Security and Privacy (EuroS&P); 2022 June 06; Genoa, Italy.
3. Ji Yuede, Huang H. Howie. Aquila: Adaptive Parallel Computation of Graph Connectivity Queries. Proceedings of the 29th International Symposium on High-Performance Parallel and Distributed Computing (HPDC); 2020; c2020.
4. Bowman Benjamin, Laprade Craig, Ji Yuede, Huang H Howie. Detecting Lateral Movement in Enterprise Computer Networks with Unsupervised Graph AI. 23rd International Symposium on Research in Attacks, Intrusions and Defenses (RAID 2020); 2020; c2020.
5. Ji Y, Liu H, Hu Y, Huang H. i S pan : Parallel Identification of Strongly Connected Component with Spanning Trees. ACM Transactions on Parallel Computing. 2022 September 30; 9(3):1-27. Available from: <https://dl.acm.org/doi/10.1145/3543542> DOI: 10.1145/3543542

Synergistic Activities

1. Mentoring: The PI has mentored five high school students (two female) and three other female graduate students at UNT.
2. Awards and Honors: Best Paper Award in International Conference on Network and Parallel Computing (NPC) 2014
3. Technical Program Committee: ACM International Symposium on High-Performance Parallel and Distributed Computing (HPDC), 2023
4. Reviewer: IEEE Transactions on Parallel and Distributed Systems (TPDS), 2022
5. Panelist: NSF 2022, 2023

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Ji, Yuede in SciENCv on 2023-02-09 21:14:09