

Yihao Jia

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Ph.D. in Computer Networks, Computer Science

PROFESSIONAL EXPERIENCE

Huawei	Sep 2019 - Present
Senior Researcher, Central Research Institute, 2012 Lab	Beijing
<ul style="list-style-type: none">Researching on techniques surrounding the Internet Protocol (IP), concentrating upon decentralized identifier, IPv6, network privacy, zero-trust network, ID/Locator split, <i>etc.</i>Promoting and Standardizing innovations at international organizations (<i>e.g.</i>, IETF, ITU-T, ETSI) and official organizations in China (<i>e.g.</i>, CCSA).	

EDUCATION

Tsinghua University	Sep 2014 - Jul 2019
Internet Architecture / Ph.D. -- Computer Science	Beijing, China
Northwestern University	Sep 2017 - Sep 2018
Computer Networks / Visiting Scholar -- Computer Science	Chicago, USA
University of Electronic Science and Technology of China (UESTC)	Sep 2010 - Jul 2014
Networking Science / Bachelor -- Information and Communication Engineering	Chengdu, China
National Taiwan University of Science and Technology (NTUST)	Sep 2012 - Feb 2013
Information Science / Exchange Student -- Information and Communication Engineering	Taipei, Taiwan

RESEARCH EXPERIENCE

Inter-domain IP Source Address Validation	Feb 2016 - May 2019
<ul style="list-style-type: none">Designed a collaborative IP source address validation mechanism in inter-domain area (Linux)Modeled and Simulated the tremendous AS-level data in evaluating the defense efficiency of the DDoS attack	
Network Anomalies Perception	Jan 2018 - Oct 2018
<ul style="list-style-type: none">Analyzed CDN replica assignment behavior in reflecting network anomaliesDeveloped a "Network Anomalies Perception" system based on replica assignment behaviors (Python)	
Adaptive Web Style Engine	Sep 2017 - Mar 2018
<ul style="list-style-type: none">Designed a framework of "Adaptive Web Style Engine" -- dynamically web style optimization with Machine LearningDeveloped a Chrome Extension to constantly collect user preference (JavaScript, HTML, CSS)	
Identity Embedded IPv6 Address Network	Mar 2014 - Jun 2017
<ul style="list-style-type: none">Designed an IPv6 address generation algorithm with scalable and verifiable user's identity.Developed an IP address traceable system for multi-networks (Java, SQL)	

SELECTED PUBLICATIONS

pSAV: A Practical and Decentralized Inter-AS Source Address Validation Service Framework	Jun 2021
International Symposium on Quality of Service - IWQoS'21	Tokyo, Japan
Poster: Enhancing Remote Healthiness Attestation for Constrained IoT Devices	Oct 2020
IEEE International Conference on Network Protocols - ICNP'20	Madrid, Spain
Address Protection-as-a-Service An inter-AS Framework for IP Spoofing Resilience	Dec 2019
IEEE Global Communications Conference - GLOBECOM'19	Hawaii, USA
Perceiving Internet Anomalies via CDN Replica Shifts	May 2019
International Conference on Computer Communications - INFOCOM'19	Paris, France
Review of Internet Inter-Domain IP Source Address Validation Technology	Feb 2018
Journal of Software (Journal in Chinese, EI Index)	
Revisiting IP Spoofing Let the Protection Drive Source Address Validation	Dec 2017
International Performance Computing and Communications Conference - IPCCC'17	San Diego, USA

HONORS & AWARDS

National Fund - China Scholarship Council	2017
National Scholarship - Ministry of Education of the People Republic of China	2013

ACCOMPLISHMENTS

- Languages:** English (Professional), Chinese / Mandarin (Native)
- Skillset:** Algorithms, Internet measuring, IPv6, DNS, DDoS mitigation
- Platform:** LaTeX, Git, Docker, Wireshark, RIPE Atlas
- Courses:** Internet Routing Protocols, Algorithms and Complexity, Combinatorics, Graph Theory, etc