Vasaka Visoottiviseth

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Mahidol University
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Nakhon Pathom 73170
Thailand

Research Interests

Internet Routing, Traffic Measurement and Classification, Cyber Security, Network/Mobile Security, IoT Security, Mobile and Wireless Communication

Professional Experience

Program Director of Master in Cyber Security and Information Assurance program, Faculty of ICT, Mahidol University, 2018-present
Associate Professor, Faculty of ICT, Mahidol University, 2015-present
Assistant Professor, Faculty of ICT, Mahidol University, 2009-2015
Assistant Professor, Department of Computer Science, Faculty of Science, Mahidol University, 2007-2009
Lecturer, Department of Computer Science, Faculty of Science, Mahidol University, 2003-2007

Education

Doctor of Philosophy (Computer Engineering)
Nara Institute of Science and Technology (NAIST), Japan, March 2003.

Master of Engineering (Computer Engineering)
Tokyo University of Agriculture and Technology (TUAT), Japan, March 1999.

Bachelor of Engineering (Computer Engineering)
Tokyo University of Agriculture and Technology (TUAT), Japan, March 1997.

Professional Certificates

Cisco CCNA, Cisco CyberOps,
(ISC)^2 CC, (ISC)^2 CISSP,
ISO 27001:2013 Internal Audit, ISO/IEC 27001:2022 Lead Auditor Practitioner,
CompTia Pentest+, Security+, CySA+, SecurityX,
EC-Council Certified Ethical Hacker (CEH), Computer Hacking Forensic Investigator (CHFI)

Training Certificates

Leader Auditor for Thailand Cybersecurity Act, 2022

Selected Honors

Thai Government Scholarship for Bachelor, Master, and Ph.D., 1992-2003
Excellent Paper Award of SIGMOBILE, Information Processing Society of Japan (IPSJ), Japan, 1998.
Best Paper and Best Poster Award, ICT-ISPC2015
Best paper awards, AINTEC2018

Best paper awards, ICACT2019
First Prize in Samart Innovation Award, 2008
Third prizes in the category of RFID and the category of Software for Disabilities, National
Software Contest 2010
Second prize in the category of software for Education, National Software Contest 2011
First prize in the category of Software for Disabilities, National Software Contest 2012
First prize in Princess IT Awards, 2012
First Prize in Open Source Category, National Software Contest 2017
Second Prize in Mobile Application Category, National Software Contest 2019

Selected Professional Service
Reviewer of Elsevier Computer Security Journal
Technical Program Committee of ICT-ISPC 2012-2018
Technical Program Committee of AINTEC 2016-2020
Technical Program Committee of COMPSAC 2019-present
Technical Program Committee of JCSSE 2011, 2018
General Co-chair of AINTEC 2022

Selected Invited Talks and Keynote Addresses
"Research on Android Malware Detection and Android Forensics", Invited Talk,
IWSEC2018, Sendai, Japan

"Threats and Research Trends of IoT and Mobile Security", Invited Talk, IoT Security Forum
2020 (Japan), 15-17 Dec 2020

"DEPA Penetration Testing Online Training", Faculty of ICT, Mahidol University,
2021-2022

Doctoral Student Supervision
Sophon Mongkolluksamee   2016

Publication Statistics
Journal Articles: 3
Conference Papers: 63
Citations: Google Scholar: 1060 with h-index of 18
                  Scopus: 607 with h-index of 14

Selected Publications

T. Sanamontre, V. Visoottiviseth, C. Ragkhitwetsagul, "Detecting Malicious Android Game
Applications on Third-Party Stores Using Machine Learning," Lecture Notes on Data
Engineering and Communications Technologies, 2024, 202, pp. 238–251.

A. Takai, Y. Katsura, N. Yamai, R. Nakagawa and V. Visoottiviseth, "Quick Blocking
Operation of IDS/SDN Cooperative Firewall Systems by Reducing Communication
Overhead," 2024 26th International Conference on Advanced Communications Technology
(ICACT), Pyeong Chang, Korea, Republic of, 2024, pp. 1514-1520.

V. Visoottiviseth, A. Noonkhan, R. Phonpanit, P. Wanichayagosol and S. Jitpukdebodin,
"AXREL: Automated Extracting Registry and Event Logs for Windows Forensics," 2023
27th International Computer Science and Engineering Conference (ICSEC), Samui Island,
Thailand, 2023, pp. 74-78.

P. Rattanukul et al., "Microusity: A testing tool for Backends for Frontends (BFF) Microservice Systems," 2023 IEEE/ACM 31st International Conference on Program Comprehension (ICPC), Melbourne, Australia, 2023, pp. 74-78.

V. Visoottiviseth and V. Moonkhaen, "A Centralized System for Detecting Attacks from Windows Event Logs," 2023 International Electrical Engineering Congress (iEECON), Krabi, Thailand, 2023, pp. 367-371.

Y. Katsura, P. Sakarin, N. Yamai, H. Kimiyama and V. Visoottiviseth, "Quick Blocking Operation of Firewall System Cooperating with IDS and SDN," 2022 24th International Conference on Advanced Communication Technology (ICACT), PyeongChang Kwangwoon_Do, Korea, Republic of, 2022, pp. 393-398.

N. M. Min, V. Visoottiviseth, S. Teerakanok and N. Yamai, "OWASP IoT Top 10 based Attack Dataset for Machine Learning," 2022 24th International Conference on Advanced Communication Technology (ICACT), PyeongChang Kwangwoon_Do, Korea, Republic of, 2022, pp. 317-322.

V. Visoottiviseth, T. Khengthong, K. Kesorn and J. Patcharadechathorn, "ASPAHI: Application for Security and Privacy Awareness Education for Home IoT Devices," 2021 25th International Computer Science and Engineering Conference (ICSEC), Chiang Rai, Thailand, 2021, pp. 388-393.

V. Visoottiviseth, T. Jongjariyangkul, P. Khambanguay and C. Toranathumkul, "ICNET: an Edutainment Web Application for Learning Computer Networks," 2021 25th International Computer Science and Engineering Conference (ICSEC), Chiang Rai, Thailand, 2021, pp. 206-211.

Vasaka Visoottiviseth, Pranpariya Sakarin, Jetnipat Thongwilai, Thanakrit Choobanjong, "Signature-based and Behavior-based Attack Detection with Machine Learning for Home IoT Devices," TENCON 2020 - 2020 IEEE Region 10 Conference, Osaka, Japan, 2020. (Virtual Conference due to Covid-19)

Vasaka Visoottiviseth, Gannasut Chutaporn, Sorakrit Kungvanruttana, Jirapas Paisarnduangjan, "PITI: Protecting Internet of Things via Intrusion Detection System on Raspberry Pi," The 11th International Conference on ICT Convergence (ICTC 2020), October 21-23, 2020, Ramada Plaza Hotel, Jeju Island, Korea. (Virtual Conference due to Covid-19)

Sirasit Prinyavitit, Vasaka Visoottiviseth, Jason Haga, Ryousei Takano, "Digital Poster Management System on SAGE2," IEEE Symposium on Computer Applications & Industrial Electronics (ISCAIE 2020), 18-19 April 2020, Penang, Malaysia. (Virtual Conference due to Covid-19)

Vorameth Reantongcome, Vasaka Visoottiviseth, Wudhichart Sawangphol, Assadarat Khurat, Doudou Fall, Shigeru Kashihara,"Securing and Trustworthy Blockchain-based Multi-Tenant Cloud Computing",IEEE Symposium on Computer Applications & Industrial Electronics (ISCAIE 2020), 18-19 April 2020, Penang, Malaysia. (Virtual Conference due to Covid-19)

Nualrath Pojsomphong, Vasaka Visoottiviseth, Wudhichart Sawangphol, Assadarat Khurat, Doudou Fall, Shigeru Kashihara,"Investigation of Drone Vulnerability and its Countermeasure," IEEE Symposium on Computer Applications & Industrial Electronics (ISCAIE 2020), 18-19 April 2020, Penang, Malaysia. (Virtual Conference due to Covid-19)

Chayapon Puakalong, Vasaka Visoottiviseth, Assadarat Khurat, Wudhichart Sawangphol and Ryousei Takano, "A Bandwidth Limitation for the DEMU Network Emulator",IEEE Symposium on Computer Applications & Industrial Electronics (ISCAIE 2020), 18-19 April 2020, Penang, Malaysia. (Virtual Conference due to Covid-19)

Purit Phan-Udom, Vasaka Visoottiviseth and Ryosei Takano,"Intercontinental Disk-to-Disk Data Transfer Experiment with a Lightweight DTN Software Stack,", 2020 22nd International Conference on Advanced Communication Technology (ICACT), Phoenix Park, PyeongChang,, Korea (South), 2020, pp. 485-490.

Vasaka Visoottiviseth, Chatchawan Kotarasu, Niramit Cheunprapanusorn, Thitiwut Chamornmarn, A Mobile Application for Security Assessment towards the Internet of Thing devices", the 6th Asian Conference on Defence Technology 2019 (ACDT 2019), 13-15 November 2019, Bali, Indonesia.

Vasaka Visoottiviseth and Krit Poonsiri, "The Study of DNSSEC Deployment Status in Thailand", the 6th Asian Conference on Defence Technology 2019 (ACDT 2019), 13-15 November 2019, Bali, Indonesia.

Navaporn Chockwanich and Vasaka Visoottiviseth, "Intrusion Detection by Deep Learning with TensorFlow," in Proceeding of IEEE International Conference on Advanced Communication Technology 2019 (ICACT 2019), 17-20 February 2019, Phoenix Park, South Korea.

Sophon Mongkolluksamee, Vasaka Visoottiviseth, Kensuke Fukuda, "Robust Peer to Peer Mobile Botnet Detection by Using Communication Patterns," The 14th Asian Internet Engineering Conference 2018 (AINTEC2018), ACM, 12-14 November 2018, Bangkok, Thailand.

Noppanat Phumkaew and Vasaka Visoottiviseth, "Android Forensic and Security Assessment for Hospital and Stock-and-Trade Applications in Thailand," The 15th International Joint Conference on Computer Science and Software Engineering (JCSSE2018), 11-13 July 2018, Mahidol University, Nakhon Prathom, Thailand.

Vasaka Visoottiviseth, Pongnapat Jutadhammakorn, Natthamon Pongchanchai and Pongjarun Kosolyudhthasarn, "Firmaster: Analysis Tool for Home Router Firmware", the 15th International Joint Conference on Computer Science and Software Engineering (JCSSE2018), 11-13 July 2018, Mahidol University, Nakhon Prathom, Thailand.

Nuntapob Puttawong, Atit Phungphat, Pamanut Chantaraaumporn, Vasaka Visoottiviseth and Jason Haga, "Lord of Secure: the Virtual Reality Game for Educating Network Security," the 2018 Seventh ICT International Student Project Conference (ICT-ISPC 2018), 11-13 July 2018, Mahidol University, Nakhon Prathom, Thailand.

Vasaka Visoottiviseth, Rossarin Sainont, Thanatorn Boonnak and Vorapas Thammakulkrajang, "POMEGA: Security Game for Building Security Awareness," the 2018 Seventh ICT International Student Project Conference (ICT-ISPC 2018), 11-13 July 2018, Mahidol University, Nakhon Prathom, Thailand.

Natthamon Pongchanchai, Vasaka Visoottiviseth, Kento Ou, Nariyoshi Yamai and Naoya Kitagawa, "Countermeasure against Spoofed E-mails Using Display Name as a User Authenticator", the 2018 Seventh ICT International Student Project Conference (ICT-ISPC 2018), 11-13 July 2018, Mahidol University, Nakhon Prathom, Thailand.

V. Visoottiviseth, S. Lertviriyasawat, P. Suppiyatrakoon, P. Chitkornkitsil and N. Yamai, "REFLO: Reactive firewall system with OpenFlow and flow monitoring system," TENCON 2017 - 2017 IEEE Region 10 Conference, Penang, Malaysia, 2017, pp. 2273-2278.

V. Visoottiviseth, P. Akarasiriwong, S. Chaiyasart and S. Chotivatunyu, "PENTOS: Penetration testing tool for Internet of Thing devices," TENCON 2017 - 2017 IEEE Region 10 Conference, Penang, Malaysia, 2017, pp. 2279-2284.

Poonyavee Kasemsuwan, Vasaka Visoottiviseth,"OSV: OSPF Vulnerability Checking Tool," 14th International Joint Conference on Computer Science and Software Engineering (JCSSE2017), 12-14 July 2017, Nakhon Si Thammarat, Thailand.

Wiriyang Pipatsakulroj, Vasaka Visoottiviseth, Ryousei Takano, "muMQ: A Lightweight and Scalable MQTT Broker," IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN 2017), 12-14 June 2017, Osaka, Japan.

Chanin Tansettanakorn, Supachai Thongprasit, Siritam Thamkongka and Vasaka Visoottiviseth, "ABIS: A Prototype of Android Botnet Identification System", in the Proceedings of the fifth ICT International Student Project Conference (ICT-ISPC2016), 27-28 May 2016, Mahidol University, Nakorn Pathom, Thailand. (the 2nd prize of software contest in Group A)

Ratchasit Amornpornwiwat, Pornchanan Piyachat, Varat Chawathaworncharoen, Vasaka Visoottiviseth, Ryousei Takano, "MATEMA6: Machine Tele-Monitoring Assistance with 6LoWPAN", in the Proceedings of the fifth ICT International Student Project Conference (ICT-ISPC2016), 27-28 May 2016, Mahidol University, Nakorn Pathom, Thailand.

Sophon Mongkolluksamee, Vasaka Visoottiviseth, Kensuke Fukuda, "Combining Communication Patterns & Traffic Patterns to Enhance Mobile Traffic Identification Performance", Journal of Information Processing (JIP), March 2016, Vol. 24, No.2.

Channary Thay, Vasaka Visoottiviseth, Sophon Mongkolluksamee, "P2P Traffic Classification for Residential Network," in the Proceedings of the 19th International Computer science and Engineering Conference (ICSEC), 23-26 November 2015, Chiang Mai, Thailand.

Supachai Thongprasit, Vasaka Visoottiviseth, Ryousei Takano, "Toward Fast and Scalable Key-Value Stores Based on User Space TCP/IP Stack", The 11th Asian Internet Engineering Conference 2015 (AINTEC2015), ACM, 18-20 November 2015, Bangkok, Thailand.

Sophon Mongkolluksamee, Vasaka Visoottiviseth, Kensuke Fukuda, "Enhancing the Performance of Mobile Traffic Identification with Communication Patterns", The 39th Annual International Computers, Software & Applications Conference (COMPSAC 2015), COMPSAC Symposium on Technologies and Applications of the Internet (TAIN), Taichung, Taiwan, July 1-5, 2015

Pawit Pornkitprasan, Siwat Pruksapanya, Natth Wetchapan and Vasaka Visoottiviseth, "CAPTRAF: Cloud Assisted Per-User Traffic Management", The 4th ICT International Student Project Conference (ICT-ISPC 2015), 23-24 May 2015, Tokyo University of Agriculture and Technology, Tokyo, Japan. (Best Paper and Best Poster Award)

Pawit Pornkitprasan, Vasaka Visoottiviseth, Ryousei Takano, "Engaging Hardware-Virtualized Network Devices in Cloud Data Centers", The 3rd ICT International Student Project Conference (ICT-ISPC 2014), 26-27 March 2014, Mahidol University, Nakorn Pathom, Thailand. (Best Paper Award)

Kantiya Junhom, Sirada Semkham, Paphawee Lumlert, Phapan Niampoonthong, Vasaka Visoottiviseth, "Cloudbroid: An Android Mobile Application for CloudStack Management System", The 3rd ICT International Student Project Conference (ICT-ISPC 2014), 26-27 March 2014, Mahidol University, Nakorn Pathom, Thailand.

Tanasak Janpan, Vasaka Visoottiviseth, Ryousei Takano, "Virtual Machine Consolidation Framework for CloudStack Platforms", in Proceedings of the International Conference on Information Networking 2014 (ICOIN 2014), 10-12 Feb 2014, Phuket, Thailand.

Chutima Chorrojprasert, Chonnikarn Nguanprasert, Tanva Phattanapanichkul, Vasaka Visoottiviseth, "iRecovery: Muscle Exercising Game for Stroke Rehabilitation",The 2012 First ICT International Senior Project Conference (ISPC2012) and IEEE Thailand Senior Project Contest, Mahidol University, Nakorn Pathom, Thailand.

Chalee Vorakulpipat, Vasaka Visoottiviseth, Siwaruk Siwamogsatham, Polite sender: A resource-saving spam Email countermeasure based on sender responsibilities and recipient Justifications, Computers & Security, Elsevier, Volume 31, Issue 3, May 2012, Pages 286-298.

Vasaka Visoottiviseth, Akkasit Trunganont,and Siwaruk Siwamogsatham, "Cross-layer based adaptive wireless traffic control for per-flow and per-station fairness", EURASIP Journal on Wireless Communications and Networking 2011, 2011:97, doi:10.1186/1687-1499-2011-97

Vasaka Visoottiviseth, Chaiwat Yanprasop, Panita Pongpaibool, "DAA: Distributed Address Auto-configuration for Mobile Ad Hoc Networks", the 1st Workshop on Ubiquitous Computing for Symbio-Information Processing (UCSIP) held in conjunction with 2011 Eighth International Joint Conference on Computer Science and Software Engineering (JCSSE), 11-13 May 2011, Nakhon Prathom, Thailand.

Vasaka Visoottiviseth, Uttapol Jaralrungroj, Ekkachai Phoomrungraungsuk, Pongpak Kultanon, "Distributed Honeypot Log Management and Visualization of Attacker Geographical Distribution", 2011 Eighth International Joint Conference on Computer Science and Software Engineering (JCSSE), 11-13 May 2011, Nakhon Prathom, Thailand.

Vasaka Visoottiviseth, Akkasit Trunganon, Siwaruk Siwamogsatham, "Adaptive Bandwidth Allocation for Per-Station Fairness on Wireless Access Router", the 10th International Symposium on Communication and Information Technology 2010 (ISCIT 2010), 26-29 October 2010, Tokyo, Japan.

Vasaka Visoottiviseth, Pairat Ngamtura, "On the Performance of MIPv6 and FMIPv6 based on Real IPv6 applications over IEEE 802.11g Testbeds", the 10th International Symposium on Communication and Information Technology 2010 (ISCIT 2010), 26-29 October 2010, Tokyo, Japan.

Chaiwat Yanprasop, Vasaka Visoottiviseth, Panita Pongpaibool, "Implementation of Fast IP Address Auto-configuration for Mobile Ad Hoc Networks", the 7th International Joint Conference on Computer Science and Software Engineering (JCSSE), May 12-14, 2010, Bangkok, Thailand.

Akkasit Trunganon, Vasaka Visoottiviseth, "Adaptive Wireless Bandwidth Allocation for Per-Station Fairness", 9th International Symposium on Communication and Information Technology 2009 (ISCIT 2009), 28-30 September 2009, Incheon, Korea.

Samruay Kaoprakhon, Vasaka Visoottiviseth, "Classification of Audio and Video Traffic over HTTP Protocol", 9th International Symposium on Communication and Information Technology 2009 (ISCIT 2009), 28-30 September 2009, Incheon, Korea.

V. Visoottiviseth, T. Piroonsith, S. Siwamogsatham, "An Empirical Study on Achievable Throughputs of IEEE 802.11n Devices", in Proceedings of the 5th International workshop on Wireless Network Measurements (WinMee2009), ICST, 26 June 2009, Seoul, Korea.

S. Pukkawanna, P. Pongpaibool, V. Visoottiviseth, "LD2: A System for Lightweight Detection of Denial-Of-Service Attacks", in Proceedings of MILCOM 2008, November 17-19, 2008, Conventional Center, San Diego, CA, USA.

V. Visoottiviseth, N. Bureenok,"Performance Comparison of ISATAP Implementations on FreeBSD, RedHat, and Windows 2003", in Proceeding of the IEEE Fourth International Symposium on Frontiers in Networking with Applications (FINA2008), Okinawa, Japan, March 2008.

S. Mongkolluksamee, V. Visoottiviseth, "Diffserv Conditionalized Handover for HMIPv6", in Proceeding of IEEE International Conference on Advanced Communication Technology 2008 (ICACT 2008), Phoenix Park, Korea, February 2008.

Pukkawanna, Vasaka Visoottiviseth, Panita Pongpaibool,"Lightweight Detection of DoS Attack", In the Proceedings of IEEE ICON2007, 19-26 November 2007, Hyatt Regency Hotel, Adelaide, South Australia.
Sirikarn Pukkawanna, Vasaka Visoottiviseth, Panita Pongpaibool, "Classification of web-based email traffic in Thailand", In the Proceedings of IEEE International Symposium on Communications and Information Technologies (ISCIT2006), 18-20 October 2006, Bangkok, Thailand.

V. Visoottiviseth, H. Kido, K. Iida, Y. Kadobayashi, S. Yamaguchi, "Performance Study and Deployment Strategies on the Sender-Initiated Multicast", The Institute of Electronics, Information and Communication Engineers (IEICE), VOL.E88-B, No.4, Special Section on Internet Technology V, pp. 1395-1402, April 2005.

Vasaka Visoottiviseth, "Sender-Initiated Multicast for small group communications", Nara Institute of Science and Technology, JAPAN, Ph.D. Thesis, Feb 2003.

V. Visoottiviseth, H. Kido, Y. Kadobayashi, S. Yamaguchi, "Sender-initiated Multicast Forwarding Scheme", In Proceedings of the 10th International Conference on Telecommunications (ICT2003), IEEE, Tahiti, Feb 2003.

V. Visoottiviseth, Y. Kadobayashi, S. Yamaguchi, "SIM: An Efficient Multicast Forwarding Scheme for Small Group Communications", The Institute of Electronics, Information and Communication Engineers (IEICE), VOL.J85-B No.8, pp.1215--1226, August 2002.

V. Visoottiviseth, T. Mogami, N. Demizu, Y. Kadobayashi, S. Yamaguchi, "M/TCP: The Multicast-extension to Transmission Control Protocol", In Proceedings of ICACT 2001, pp. 89-94, Muju, Korea, Feb 2001.

V. Visoottiviseth, Y. Kadobayashi, S. Yamaguchi, "SIM: Sender Initiated Multicast for small group communications", In Proceedings of INET 2001, Stockholm, Sweden, June 2001.

V. Visoottiviseth, H. Kido, Y. Takahashi, N. Demizu, "draft-vasaka-xcast-sim-01.txt", The Internet Engineering Task Force (IETF), Internet draft, March 2003.