PERSONAL DATA

Name : DR. JAKAPAN SUABOOT
Position : Assistant Professor of Information Technology
Email : jakapan.su@psu.ac.th
Phone : +6676276000 ext 6182
Website : https://www.researchgate.net/profile/Jakapan-Suaboot
ORCID : 0000-0002-9519-0833

PUBLICATIONS SUMMARY

11	10	1	1	5
International Journal	International. Proceedings	National. Proceedings	Books	Research Grants

Total Publications: 28

EDUCATION

Ph.D. Degree	2021	PhD (Computer Science), RMIT University.
Master Degree	2010	Master of Engineering (Computer Engineering), Prince of Songkla University
Bachelor Degree	2007	Bachelor of Engineering (Computer Engineering), Prince of Songkla University

RESEARCH INTERESTS

Data Leakage Detection

Machine Learning

Malware Detection

Memory Forensics

Network Security

APPOINTMENT

2023 December – Present
Assistant Professor (Information Technology)
2022 April – 2023 April
Chairperson of Master of Science Program in Computing
2013 October – 2015 October
Associate Department Head for Student Affairs, Department of Computer Engineering, Faculty of Engineering, Prince of Songkla University, Phuket Campus
2010 May - 2013 September
Lecturer, Department of Computer Engineering, Faculty of Engineering, Prince of Songkla University, Phuket Campus

TEACHING

Current Teaching:
Cybersecurity
Hacking and Penetration Security Testing
Computer Operation Systems
Medical Digital Technology

Courses in the past:
Introduction to Computer Programming
Data Structures and Computer Programming Techniques
Mathematics for Computer Engineering
Computer Security
Cybersecurity
Software Engineering
Software Development Methodologies
Client/Server Computing and Web Technologies
Supervisor of over 50 senior projects during 2011-2014

Short Courses:
Open source software for business using LibreOffice
Full Stack Java Script Framework with MEAN (Mongo Express Angular Node)

MSc/PhD STUDENTS

1. Mr.Tadiwa Vhito (2023 - Present)
2. Mr.Kaung Khant Wai Yan (2024-Present)

I am accepting master students, Master of Science (Computing). Please feel free to contact me if you are interested in doing research on the following topics:
- Malware detection
- Data leakage detection
- Memory forensics
- Penetration testing
- Sequential patterns mining
- Cybersecurity and machine learning.

For a scholarship, please apply here.

A **research assistant position** is available. Email me for details.

TRAINING

Oct. 28, 2025: Cybersecurity Professional Course by Thailand National Cyber Academy (THNCA), Online.
Oct. 28, 2025: Basic Cybersecurity lab by NCSA Mooc Cyber-Learning, Online.
Sep. 16-18, 2025: Participated in AI security for research by NCSA, Bangkok, Thailand
July. 22-23, 2024: Participated in International Workshop on Intelligent Embedded Security for Internet of Things Systems, NTU Singapore.
Aug. 24-25, 2023: Attended the Hack In The Box 2023 (HITB 2023 Phuket) conference.
Dec. 12-14, 2022: Participated in C3 Consensus, Concurrency & Cryptography Workshop.
Nov. 5-6, 2022: Participated in Red x Blue Pill 2022 by 2600 Thailand, Bangkok, Thailand.
Feb. 17-21, 2014: Participated in a training course: Mobile Application & Cloud Computing
Sep. 13-15, 2013: Participated in a training course Agile – an Alternative Software Development
Mar. 29-31, 2013: Participated in a training course: Oracle Database 11g Release 2: SQL Performance Tuning To High Speed SQL For DBA and Developer
Jul. 9-10, 2011: Participated in a training course: Android based Application Development
Mar. 31 – Apr.1, 2011: Participated in a training course: Windows Phone 7 Boot Camp
Aug. 29 – Nov.8, 2010: Participated in a training course and obtained the Personal Software Process: PSP (SEI Certified PSPSM Developer)
Nov. 11-12, 2008: Participated in "SAP SOA University Certification Program in Collaboration with PTT ICT" program and obtained the level 1: SAP SOA Technology Day.
Jul. 1 – Nov. 26, 2006: Participated in a training course and obtained the SUN CERTIFIED PROGRAMMER FOR THE JAVATM 2.

OTHERS

Invited Speaker
- "Malware Threat Analysis: From Research to Hands-On Defense," หลักสูตร Public Training โครงการพัฒนาศักยภาพด้านความมั่นคงปลอดภัยไซเบอร์ แก่บุคลากรด้านสาธารณสุข, 12 October 2025.
- "Malware Detection: Recent Advances, Analysis Approaches Through Memory Forensics, and Research Challenges, "Cybersec Asia X Thailand International Week 2025, Jan. 22, 2025.

Session chair
- The 9th International Conference on Information Technology (InCIT 2025), 12 - 14 November, Phuket, Thailand, 2025.
- The 21st International Joint Conference on Computer Science and Software Engineering (JCSSE 2024), 20 June, Phuket, Thailand, 2024.
- The 4th International Symposium on Asia AI (AI for Better Living & Environment), Phuket, Thailand, 2022.

Reviewer
Journals:
-Engineering and Technology Horizons (ETH) (ISSN: 2985-1688, Scopus)

-ECTI Transactions on Computer and Information Technology (ECTI-CIT) (ISSN: 2286-9131, Scopus)
-Scientific Reports (ISSN / eISSN 2045-2322**,** WoS SCIE, SJR Q1, IF 3.8)
-International Journal of Information Security (E-ISSN:1615-5270 IF 2.5)
-Discover Internet of Things (eISSN:2730-7239 CiteScore2023 7.5)
-ACM Computing Surveys (ISSN:0360-0300 IF 16.6)
-International Journal of Machine Learning and Cybernetics (eISSN: 1868-808X IF:5.6)
-The Journal of Supercomputing (eISSN 1573-0484 IF3.0)

-Journal of Information Science and Technology (JIST) (eISSN 2651-1053)
Proceedings:
- APSIPA ASC 2026.

- JCSSE 2026.
- InCIT 2025 + nCIT 2025.
- ECTI-CON 2024: The 21st International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology
- JCSSE 2024 The 21st International Joint Conference on Computer Science and Software Engineering
- InCIT2023: The 7th International Conference on Information Technology
- The 2024 Asia Joint Conference on Computing (AJCC2024)
- 2023 20th International Joint Conference on Computer Science and Software Engineering (JCSSE)
- The 20th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), MAY 9-12, 2023
- The International Conference on Sustainable Environment and Energy 2022 (ICoSEE 2022)

INTERNATIONAL JOURNAL ARTICLES

N. Songsom, **J. Suaboot**, W. Werapun, "FSA: A Framework for Analyzing Secondary Preimage Attacks on Merkle Proof-Based Airdrops," *Blockchain: Research and Applications*, Vol.7, Issue 5, October 2026, pp.1-14 (ISSN:2096-7209; Scopus Q1-tier1).

https://doi.org/10.1016/j.bcra.2025.100368

10/2026

W. Werapun, T. Karode, **J. Suaboot**, T. Arpornthip, E. Sangiamkul, "Exploring Risk and Return Profiles of Funding Rate Arbitrage on CEX and DEX," *Blockchain: Research and Applications*, Vol.7, Issue 4, August 2026, pp.1-11 (ISSN:2096-7209; Scopus Q1-tier1).

https://doi.org/10.1016/j.bcra.2025.100354

8/2026 *Cryptocurrency, perpetual futures contract, funding rate arbitrage, risk and return profiles*

N. Songsom, **J. Suaboot**, W. Werapun, "Resolving the Token Loss Vulnerability in the Ethereum ERC-20 Standard," *Blockchain: Research and Applications*, Vol.7, Issue 2, April 2026, pp.1-12 (ISSN:2096-7209; Scopus Q1-tier1).

https://doi.org/10.1016/j.bcra.2025.100329

4/2026 *blockchain, ERC-20, Smart Contract, Formal verification*

V. Azhmyakov, W. Werapun, **J. Suaboot**, "On the Hamilton-Jacobi-Bellman Approach to the Relaxed Optimal Feedback Control Problems," *Journal of the Franklin Institute*, Vol. 362, Issue 7, pp.1-17, May, 2025.(ISSN 0016-0032; ISI-SCIE; Scopus Q1-tier1)

https://doi.org/10.1016/j.jfranklin.2025.107667

5/2025 *optimal feedback control, relexation techniques, HJB equation*

W. Werapun, N. Boonpeam, E. Sangiamkul, **J. Suaboot**, "The Automated Arbitrage Strategy of Cross Cryptocurrency Exchanges," *International Journal of Information Technology & Decision Making (IJITDM)*, Vol. 24, No. 05, Mar 22, 2025, pp. 1521-1537. (ISSN 0219-6220; ISI-SCIE; Scopus Q1)

https://doi.org/10.1142/S0219622025500130

3/2025 *Cryptocurrency, Arbitrage*

N. Rattanavipanon, **J. Suaboot**, W. Werapun, "A Toolchain for Assisting Migration of Software Executables Towards Post-Quantum Cryptography," *IEEE Access*, Vol. 13, 2024, pp.4368 - 4380. (ISSN 2169-3536; ISI-SCIE; Scopus Q1-tier 1)

https://ieeexplore.ieee.org/document/10819261

12/2024 *quantum, cryptography*

W. Werapun, **J. Suaboot**, P. Tantisarkhornkhet, and J. Thaenthong, "SVC-MST BWQLB Multicast over

Software-Defined Networking," *Int. J. Internet Protocol Technology*, vol.16, issue 4, 2023, pp.204-216 (Scopus indexed)

http://dx.doi.org/10.1504/IJIPT.2023.139339

7/2024 *internet protocol, software define network, multimedia*

W. Werapun, T. Karode, **J. Suaboot,** T. Arporntip, E. Sangiamkul, "NativeVRF: A Simplified Decentralized Random Number Generator on EVM Blockchains," *Systems*, Vol . 11, Issue 7:326, 25 June 2023, pp.1-23. [ISI-SSCI Q1]

https://www.mdpi.com/2079-8954/11/7/326

6/2023 *blockchain, random number generator*

W. Werapun, T. Karode, T. Arpornthip, **J. Suaboot**, E. Sangiamkul, and P. Boonrat, "The Flash loan Attack Analysis (FAA) Framework -- A Case Study of the Warp Finance Exploitation," *Informatics*, Vol.10, Issue 1, December 2022, pp.1-22. [SCOPUS Q1-tier 1]

http://dx.doi.org/10.3390/informatics10010003

12/2022 *flash loan attacks, defi vulnerability, Cryptocurrency, equity*

J. Suaboot, A. Fahad, Z. Tari, J. Grundy, A.N. Mahmood, A. Almalawi, A.Y. Zomaya, and K. Drira. A taxonomy of supervised learning for IDSs in SCADAenvironments. *ACMComputing Surveys (CSUR)*, 53(2): 1–37, 2020. (A* journal/ISI-SCIE Q1 tier 1)

https://dl.acm.org/doi/10.1145/3379499

4/2020

J. Suaboot, Z. Tari, A.N. Mahmood, A.Y. Zomaya, and W. Li. Sub-curve HMM: A malware detection approach based on partial analysis of API call sequences. *Computers & Security*, 92: 1–15, 2020. (Rank 2nd – Google Scholar Metrics, Computer Security & Cryptography/ISI-SCIE Q1-tier 1)

https://doi.org/10.1016/j.cose.2020.101773

3/2020

INTERNATIONAL PROCEEDINGS

K. K. W. Yan, **J. Suaboot**, M. Puongmanee, W. Werapun, "LiteXGNN: A Lightweight Explainable Graph Neural Network for Malware Detection with Control Flow Graph Explainability," in *The 9th International Conference on Information Technology (InCIT)*, 12-14 Nov., Phuket, Thailand, 2025, pp.658-664.

https://doi.org/10.1109/InCIT66780.2025.11276013

11/2025 *malware, cfg, xai, memory forensics*

T. Vhito, **J. Suaboot**, W. Werapun, T. Kliangsuwan, "Effects of Malware Detection Parameters on Classical vs Deep ML Techniques," in *The 7th International Conference on Information Technology (InCIT2023)*, 15-17 Nov. 2023, Chiang Rai, Thailand, pp. 440-445.

https://doi.org/10.1109/InCIT60207.2023.10413140

11/2023 *malware, machine learning*

W. Werapun, N. Songsom, T. Khongfai, A. Intrapradit, **J. Suaboot**, "Andaman Token: A Feasibility Study of Blockchain Adoption in the Tourism Industry," in *2023 14th International Conference on Information and Communication Technology Convergence (ICTC 2023)*, 11-13 Oct. 2023, Jeju Island, Korea, pp. 681-686.

https://doi.org/10.1109/ICTC58733.2023.10392748

10/2023 *token, Tourism , phuket*

S. Rattanabunno, W. Werapun, **J. Suaboot**, T. Karode, M. Puongmanee, "An EOA Identity Tracing System (AITS) on Ethereum Blockchain," in *2023 8th International Conference on Information and Network Technologies (ICINT 2023)*, Tokyo, Japan, May 19-21, 2023, pp.61-65.

https://doi.org/10.1109/ICINT58947.2023.00019

5/2023

C. Jiamsuchon, **J. Suaboot** and N. Rattanavipanon, "From Characters to Chaos: On the Feasibility of Attacking Thai OCR with Adversarial Examples," *2023 20th International Conference on Electrical Engineering/Electronics,*

Computer, Telecommunications and Information Technology (ECTI-CON), 9-12 May, Nakhon Phanom, Thailand, 2023, pp. 1-5, doi: 10.1109/ECTI-CON58255.2023.10153157.

https://ieeexplore.ieee.org/document/10153157

5/2023

N. Songsom, W. Werapun, **J. Suaboot**, N. Rattanavipanon, "The SWC-Based Security Analysis Tool for Smart Contract Vulnerability Detection," In *the 6th International Conference on Information Technology (InCIT)*, 10-11 Nov., Bangkok, Thailand, 2022, pp.74-77.

https://ieeexplore.ieee.org/document/10067759

11/2022 *blockchain, swc*

S. Witosurapot and **J. Suaboot**, "Smart Grid Group Security for UPnP-based Smart Home Automation," *in the 29th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2014),* July 1-4, 2014, Phuket, Thailand, pp. 610-611.

7/2014

W. Werapun and **J. Suaboot**, "Data Integrity for Energy Measurement of Sensor Nodes as Home Services," (to be published) *in the 29th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2014),* July 1-4, 2014 Phuket, Thailand, pp. 829-830.

7/2014

J. Surbot and S. Witosurapot, "A Collaboration Agent for Exploiting Legacy Phones in Assistive UPnP-based Home Environments," in *Proceeding of The 7th International Joint Conference on Computer Science and Software Engineering (JCSSE 2010)*, Bangkok, Thailand, May. 12-14, 2010.

https://www.researchgate.net/publication/321161005_A_Collaboration_Agent_for_Exploiting_Legacy_Phones_in_Assistive_UPnP-based_Home_Environments

5/2010

J. Surbot and S. Witosurapot, "Integrating Group Key Distribution for Securing UPnP Services," in *Proceeding of The 2nd International Conference on Computer Engineering and Technology (ICCET 2010)*, Chengdu, China, Apr. 16-18, 2010, pp. 181-185.

https://dx.doi.org/10.1109/iccet.2010.5485284

4/2010

NATIONAL PROCEEDINGS

J. Surbot and S. Witosurapot, "Discovering Secured Group Services among UPnP Networks ," in *Proceeding of The 6th National Conference on Computing and Information Technology (NCCIT 2010)*, Bangkok, Thailand, Jun. 3-5, 2010.

6/2010

BOOKS

Z. Tari, N. Sohrabi, J. Samadi, **J. Suaboot**, Data Exfiltration Threats and Prevention Techniques: Machine Learning and Memory-Based Data Security, USA, Wiley-IEEE Press, 27 Jun. 2023, 272 pages, ISBN 1119898870, https://amzn.asia/d/cw0Sc0i

7/2023

RESEARCH GRANTS

Automated Seagrass Area Estimation Using Computer Vision and Machine Learning on Drone Imagery : 391,000 baht funded by Prince of Songkla University, 2025 - 2026

2025

Beware of Quantum Threat: Detection of Vulnerable Software Binaries in Quantum World
: 599,060 baht funded by Government Budget Grant, 2024

2024

INFAR (Information engineering for Andaman Region) Research Team
: 750,000 baht funded by College of Computing, Prince of Songkla University, 2022 - 2024

2022

BLOCK Research team
: 750,000 baht funded by College of Computing, Prince of Songkla University, 2020 - 2022

2020

Cyber Security Grants from National Research Council of Thailand (NRCT) on project “Development of Secured Group Communication for UPnP Technology in Smart Grid-enabled Home Energy Management”
, 2013

2013

Scan Me!! CV Online

COLLEGE OF COMPUTING
Prince of Songkla University Phuket Campus
80 M.1 Vichitsongkram Road Kathu, Phuket 83120
Email: coc@phuket.psu.ac.th
Website: computing.psu.ac.th