# PERSONAL DATA



Name: Dr. JAKAPAN SUABOOT

**Position**: Assistant Professor of Information Technology

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# **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

# **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.

## INTERNATIONAL JOURNAL ARTICLES

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*, 1 August 2025, pp.1-11 (In Press; ISSN:2096-7209; Scopus Q1-tier1).

- https://doi.org/10.1016/j.bcra.2025.100354
- 🛍 8/2025 🕜 Cryptocurrency, perpetual futures contract, funding rate arbitrage, risk and return profiles
- N. Songsom, **J. Suaboot**, W. Werapun, "FSA: A Framework for Analyzing Secondary Preimage Attacks on Merkle Proof-Based Airdrops," *Blockchain: Research and Applications*, (Accepted 23 Apr 2025) (In Press; ISSN:2096-7209; Scopus Q1-tier1).
- https://doi.org/10.1016/j.bcra.2025.100368
- **# 8/2025**
- N. Songsom, **J. Suaboot**, W. Werapun, "Resolving the Token Loss Vulnerability in the Ethereum ERC-20 Standard," *Blockchain: Research and Applications*, 2 Jul 2025, pp.1-12 (In Press; ISSN:2096-7209; Scopus Q1-tier1).
- ₱ https://doi.org/10.1016/j.bcra.2025.100329
- 🛗 7/2025 🕜 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
- 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 Q1]
- https://www.mdpi.com/2079-8954/11/7/326
- iii 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/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 6th Google Scholar Metrics, Computer Security & Cryptography/ 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.1-7.
- 🟥 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
- 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
- <sup>™</sup> 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
- iii 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.
- $^{\ell}$  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

#### 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 Al 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 Detection: Recent Advances, Analysis Approaches Through Memory Forensics, and Research Challenges, "Cybersec Asia X Thailand International Week 2025, Jan. 22, 2025.

#### Session chair

- 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:

- -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**

- 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)

# 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**

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