

## PERSONAL DATA



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## EDUCATION

Ph.D. Degree	2012	Ph.D. (Technology), Sirindhorn International Institute of Technology, Thammasat University
Master Degree	1998	M.Sc. (Information Technology), King Mongkut's Institute of Technology Ladkrabang
Bachelor Degree	1996	B.Sc. (Computer Science), Prince of Songkla University

## RESEARCH INTERESTS

Vehicular Networks & Traffic Management  
 Intelligent Transportation System  
 Mobile Ad-hoc Networks (Bluetooth Low Energy, LoRa, Wi-Fi)  
 Network Automation with AI for Cloud Computing  
 Internet of Things for the Emergency alert system  
 Smart Health

*Integration of Data Dissemination Models and Cloud Computing for Vehicular Networks*



*Traffic Engineering for Vehicular Networks*



*Emergency Alert System Platform*



*Network Automation with AI for Smart Health*



## RESEARCH PROJECTS

แพลตฟอร์มการรับส่งข้อมูลสำหรับ Smart Farm ด้วยเทคโนโลยี LoRa และ Internet of Things, 2022  
 ระบบแจ้งเหตุฉุกเฉินด้วยเทคโนโลยี LoRa Mesh (An Emergency Alert System with LoRa Mesh Technology), 2021  
 Emergency Alert Model with LoRa Mesh Network for Elevator, 2020  
 Observation of mobile device communication on the ad-hoc network by using Bluetooth Low Energy (BLE) technology, 2020  
 การพัฒนาและฟื้นฟูเศรษฐกิจชุมชนฐานรากเพื่อการท่องเที่ยวโดยชุมชนที่ได้รับผลกระทบจากสถานการณ์ covid – 19 ตามหลักปรัชญาเศรษฐกิจพอเพียง พื้นที่จังหวัดพังงา, 2563  
 การสร้างรายได้ให้ท่องเที่ยวชุมชนโดยการยกระดับผลิตภัณฑ์และสร้างอาชีพ ตามวิถีการท่องเที่ยวแบบ new normal จังหวัดภูเก็ต, 2563  
 Application of image processing and LoRa for waste management, 2019  
 Emergency notification with LoRa technology for the elevator, case studies of Prince of Songkla University Phuket Campus, 2019  
 Ambulance Navigation Model with Emergency Alert Message Using Cloud-based Platform-as-a-Service for the Internet of Things, 2019  
 Impact factors of Smart Bus service in Phuket Smart City, 2018  
 Cat feeder with IoT application, 2018  
 Interactive TV application development and evaluation for smart hospitals: Dibuk hospital case study, 2017  
 Mobile application development and evaluation instead of using baby and mom's memo: Dibuk hospital case study, 2017

## TEACHING

Network Protocols  
 Java Programming Laboratory  
 Cloud Computing Application Development  
 Principles of Data Communication and Computer Networks  
 Data Communications and Networking  
 Computer Networking and Management  
 Server Systems Administration  
 Special Topics (Advanced Unix)  
 Special Topics (Linux System Administration)  
 Computer Networking  
 Laboratory of Computer Networking  
 Computer Logic and Architecture  
 Operating System  
 File Structure  
 Structured Programming

## MSc/PhD Students

Mr. Vatin Jaiboon (Graduation 2017)  
 Miss Sangduan Chootong (Graduation 2017)

## INTERNATIONAL JOURNAL ARTICLES

K. Dittakan, J. Thaenthong and T. Prasomkit, "A Comparative Study on Thai License Plate Recognition: Object Detection and Transformer Learning Approaches," in *IEEE Access*, vol. 13, pp. 99802-99815, 2025, doi: 10.1109/ACCESS.2025.3575811.

🔗 <https://ieeexplore.ieee.org/document/11021500>

📅 6/2025 📌 Object Detection, Deep learning, image analysis, Transformer Learning, License Plate Detection

W. Werapun, J. Suaboot, P. Tantisarkhornkhet, and J. Thaenthong, "SVC-MST BWQLB Multicast over Software-Defined Networking," *International Journal of Internet Protocol Technology*, vol. 16, no. 1, pp. 53-69, 2023.

🔗 <http://dx.doi.org/10.1504/IJIP.2023.10058807>

📅 1/2023 📌 SDN, Multicast, Computer Networks

J. Thaenthong and S. Chootong, "Enhanced Data Dissemination for Vehicular Content-Centric Networking

(VCCN) using Cluster Maintenance System,” Science, Engineering and Health Studies, vol. 15, April 2021.

🔗 [https://1drv.ms/b/sIAk\\_cn\\_uEqFxoG1r07M26FpEQzfEa?e=lyoCGi](https://1drv.ms/b/sIAk_cn_uEqFxoG1r07M26FpEQzfEa?e=lyoCGi)

📅 4/2021 🏷️ vehicular networks, data dissemination, content-centric networking

J. Thaenthong and S. Gordon, “Gateway selection architecture using multiple metrics for vehicular networking,” Inform. Technol. J., vol. 11, no. 7, pp. 840-849, 2012.

🔗 <https://www.scopus.com/record/display.uri?eid=2-s2.0-84863218393&origin=resultslist&sort=plf->

[f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=2&citeCnt=0&searchTerm=](https://www.scopus.com/record/display.uri?eid=2-s2.0-84863218393&origin=resultslist&sort=plf-f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=2&citeCnt=0&searchTerm=)

📅 1/2012 🏷️ vehicular networks, mobile networks

J. Thaenthong and S. Gordon, “Performance of handovers between NEMO and mobile ad hoc networks using buffering,” IEICE Trans. Commun., vol. E94-B, no. 10, pp. 2763-2775, Oct. 2011.

🔗 <https://www.scopus.com/record/display.uri?eid=2-s2.0-80053533912&origin=resultslist&sort=plf->

[f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=3&citeCnt=0&searchTerm=](https://www.scopus.com/record/display.uri?eid=2-s2.0-80053533912&origin=resultslist&sort=plf-f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=3&citeCnt=0&searchTerm=)

📅 10/2011 🏷️ vehicular networks, ad-hoc networks, mobile networks

## NATIONAL JOURNAL ARTICLES

J. Thaenthong, S. Laemun and W. Duangdee, “Emergency Notification System with LoRa Technology for Elevator Case Study: Prince of Songkla University, Phuket Campus,” J. Sci. Ladkrabang, vol. 29, no. 2, pp. 1-14, Jul.-Dec. 2563. 📅 7/2020 🏷️ Internet of Things, LoRa, Emergency Alert, Elevator

J. Thaenthong et al., “Mobile Application Development for Pet Feeder with using Microcontroller and Internet of things,” J. Inf. Sci. Technol., vol. 9, no. 1, pp. 28-40, 2562.

🔗 <https://www.tci-thaijo.org/index.php/JIST/issue/view/14588/Vol9No1>

📅 6/2019 🏷️ Internet of Things, Microcontroller, Mobile Application, Pet Feeder

## INTERNATIONAL PROCEEDINGS

J. Thaenthong, T. Pimsen and K. Chidchuea, "R-AODV: Reverse Ad-Hoc On-Demand Distance Vector Routing Algorithm With LoRa Mesh Based for Emergency Alert System," *2023 15th International Conference on Information Technology and Electrical Engineering (ICITEE)*, Chiang Mai, Thailand, 2023, pp. 143-148, doi: 10.1109/ICITEE59582.2023.10317648.

🔗 <https://ieeexplore.ieee.org/document/10317648>

📅 11/2023 🏷️ Micro-controllers, Ad-hoc networks, LoRa Mesh, LoRa MeshMesh networks

J. Thaenthong, V. Kwanjun and P. Charoensuk, "Microcontroller and Internet of Things Application for Smart Restroom," 2022 Research, Invention, and Innovation Congress: Innovative Electricals and Electronics (RI2C), 2022, pp. 165-169, doi: 10.1109/RI2C56397.2022.9910335.

🔗 <https://ieeexplore.ieee.org/document/9910335>

📅 10/2022 🏷️ Internet of Things, Smart Restroom, Micro-controllers

V. Jaiboon and J. Thaenthong, "Infotainment Data Dissemination Mechanism Using RSU Cloud Based for Vehicular Networks," *2017 9th International Conference on Information Technology and Electrical Engineering (ICITEE)*, Phuket, Thailand, October 12-13, 2017.

🔗 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85049582929&origin=resultslist&sort=plf->

[f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=0&citeCnt=0&searchTerm=](https://www.scopus.com/record/display.uri?eid=2-s2.0-85049582929&origin=resultslist&sort=plf-f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=0&citeCnt=0&searchTerm=)

📅 10/2017 🏷️ vehicular networks, cloud computing

S. Chootong and J. Thaenthong. Cache Replacement Mechanism with Content Popularity for Vehicular Content-Centric Networks (VCCN). *The 14th International Joint Conference on Computer Science and Software Engineering (JCSSE 2017)*. Nakhon Si Thammarat, Thailand, 12-17 July 2017.



🔗 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85031718439&origin=resultslist&sort=plf->

[f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=1&citeCnt=0&searchTerm=](https://www.scopus.com/record/display.uri?eid=2-s2.0-85031718439&origin=resultslist&sort=plf-f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=outdocs&sdt=outdocs&sl=18&s=AU-ID%2852364890600%29&relpos=1&citeCnt=0&searchTerm=)

📅 7/2017 🏷️ vehicular networks, named data network, content-centric networks

## NATIONAL PROCEEDINGS

S. Petchamnan, J. Thaenthong, K. kunritkeav, and N. Pichairat. Flammable Gases Detection Application with Internet of Things. *The 14th National Conference on Computing and Information Technology (NCCIT 2018)*, pp. 618-623, Chiang Mai, Thailand, 5-6 July 2018.

 7/2018  Internet of Things, Mobile Application, Gas Detection

J. Thaenthong, S. Takaew, and K. Sornphrakhanchai. Microcontroller and Sensors Application for Cat Feeder. *The 41st Electrical Engineering (EECON-41)*, pp. 141-144, Ubon Ratchathani, Thailand, 21-23 November 2018.

 <https://drive.google.com/file/d/1izA38JzJZDq21ysr6gXtrg84hArRhh0f/view?usp=sharing>

 11/2018  Micro-controllers, Internet of Things, Sensors

V. Jaiboon and J. Thaenthong. Store-Carry-Broadcast-Cloud-Based. *The 8th National Conference on Information Technology (NCIT 2016)*, pp. 509-515, Krabi, Thailand, 26-27 October 2016.

 10/2016  vehicular networks, cloud computing, routing technique, store-carry broadcast

S. Chootong and J. Thaenthong. Improving the efficiency of data delivery mechanisms on cluster-based for Content-Centric Networking in VANETs. *The 8th National Conference on Information Technology (NCIT 2016)*, pp. 516-521, Krabi, Thailand, 26-27 October 2016.

 10/2016  content-centric networks, vehicular networks, clustering, k-means

W. Deklee, J. Tubtong, A. Wattanachai, and J. Thaenthong. Development of Navigation App Using AR Technology A Case Study: Prince of Songkla University, Phuket Campus. *The 11th National Conference on Computing and Information Technology (NCCIT 2015)*, pp. 143-148, Bangkok, Thailand, 2-3 July 2015.

 7/2015  Augmented Reality, Mobile Application

## TRAINING

CCNP Enterprise Core Networking (ENCOR) Trainer (2021)  
Cisco Certified Network Associate (CCNA) Routing and Switching  
Cisco ID: CSC013496256 (August 4, 2019 - August 4, 2022)  
Practical Data Mining with RapidMiner Studio 9, 2018  
OpenStack for Cloud Computing Training, 2017  
Open Cabling Professional Design & Analysis, 2017  
NETPIE Train the Trainer Workshop, 2016  
OpenStack Training Workshop, 2016  
Android Arduino Control Hardware and IoT Training Workshop, 2016  
Java Train the Trainer, 2015

## OTHERS

Executive Director, Prince of Songkla University Savings and Credit Cooperative, Limited  
Introduction to computer networking and troubleshooting for AOT (Instructor)  
System/Network Administration  
Server Administration of BSD/Linux/Unix-based Systems  
Analysis, Design and Implement in Computer Network of Phuket Community College/Faculty of Technology and Environment.  
Advisor for Computing Networks  
Former Committee of Basic Education, Phuket Kindergarten School  
Former Committee of Basic Education, Satree Phuket School  
Former Advisor of Information Technology Center, Satree Phuket School

## RESEARCH GRANTS

Integration of VANETs and Cloud Computing Architecture for Smart City  
, 2015 - 2017

 2015

A Named Data Mechanism for Mobile Application in Vehicular Ad-Hoc Networks

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#### COLLEGE OF COMPUTING

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Website : [computing.psu.ac.th](http://computing.psu.ac.th)