PERSONAL DATA



Name: Dr. JIRAWAT THAENTHONG

Position: Lecturer

Email: jirawat.t@phukt.psu.ac.th

Phone: (66)7627 6498

Website: http://www.computing.psu.ac.th/2017/academic-staff/

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 Mobile Ad-hoc Networks (Bluetooth Low Energy, LoRa, Wi-Fi) Internet of Things for the Emergency alert system Smart Health Al Agent

Data Dissemination Models for Vehicular Networks

Emergency Alert System Platform

AI for Smart Health

Deep Learning for Wi-Fi CSI-Based Fall Detection

RESEARCH PROJECTS

ระบบแจ้งเหตุฉุกเฉินด้วยเครือข่าย LoRa แบบ Mesh (Emergency Alert System with LoRa Mesh Network), 2025 ประสิทธิภาพการใช้ช้อมูล CSI เพื่องานการตรวจจับการหกล้มสำหรับผู้สูงอายุ, 2024 แพลตฟอร์มการรับส่งข้อมูลสำหรับ Smart Farm ด้วยเทคโนโลยี LoRa และ Internet of Things, 2022

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

968-230 Data Communications and Networking

140-330 Computer Networking and Management

977-321 Computer Networks and Management

140-430 Server Systems Administration

980-061G6 PSU VOLUNTEER AND SUSTAINABLE DEVELOPMENT GOALS

THE-101 Thesis 1

968-391 Project in Computing 1

968-491 Project in Computing 2

969-021G2A Financial Management

968-685 Seminar 1

MSc/PhD Students

Miss Sangduan Chootong (Ph.D Student)

Mr. Vatin Jaiboon (Graduation 2017)

Miss Sangduan Chootong (Graduation 2017)

INTERNATIONAL JOURNAL ARTICLES

K. Dittakan, J. Thaenthong, S. Rodkuen, and P. Thungklang, "Fungus Classification in Peanuts from Smart Lens Imagery Using Convolutional Neural Network", *Curr. Appl. Sci. Technol.*, p. e0265905, Oct. 2025.

https://li01.tci-thaijo.org/index.php/cast/article/view/265905/180921

🛅 10/2025 🕜 Deep learning, Convolutional Neural Network, Image Processing, Classification Model

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/IJIPT.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/s!Ak_cn_uEqFxog1r07M26FpEQzfEa?e=IyoCGi
- ## 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=autdocs&sdt=autdocs&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=autdocs&sdt=autdocs&sl=18&s=AU-lD%2852364890600%29&relpos=3&citeCnt=0&searchTerm=

iii 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
- iii 6/2019 🕜 Internet of Things, Microcontroller, Mobile Application, Pet Feeder

INTERNATIONAL PROCEEDINGS

K. Kingkaew, J. Thaenthong, and T. Suwanapong, "A Comparative Analysis of Lightweight CNN Architectures for Wi-Fi CSI-Based Fall Detection," in Proc. 20th Int. Joint Symp. Artificial Intelligence and Natural Language Processing (iSAI-NLP), Thailand, 2025, to be published.

- 🛅 11/2025 🖋 Wi-Fi CSI, Fall Detection, Deep Learning, Lightweight Convolutional Neural Network
- 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.
- *d* 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.

f&src=s&sid=36e1c0735962128860d1a5b250589273&sot=autdocs&sdt=autdocs&sl=18&s=AU-ID%2852364890600%29&relpos=0&citeCnt=0&searchTerm=

- iii 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-

iii 7/2017 ♥ vehicular networks, named data network, content-centric networks

- 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
- 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
- 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: CSCO13496256 (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 2015 - 2017

2015

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