PERSONAL DATA

Name : Asst. Prof. Dr. WARODOM WERAPUN

Position : Associate Dean for Research and Innovation

Email : warodom@werapun.com

Phone : 076-276 000 ext (6552)

Website : https://werapun.com | Github

ORCID : 0000-0003-1915-036X

SCOPUS ID : 24476713800

Web of Science AAX-2533-2020

ResearcherID :

EDUCATION

Ph.D. Degree	2009 - 2012	**Ph.D. in Computer Engineering (ENSEEIHT, France)**
		Thesis: "Architectures de réseaux pour la délivrance de services à domicile"
		Advisor: Prof. Béatrice Paillassa

Master Degree	2002 - 2005	**Master II Research in Computer Engineering (ENSEEIHT, France) 2008 - 2009**
		Thesis: "Network Operators and Home Service Studies"
		Advisor: Prof. Béatrice Paillassa
		Score: 13.67/20.00
		M. Eng. in Computer Engineering (KMITL, Bangkok) 2002 - 2005
		Thesis: "Secure Mobile IPv6 Binding Updates using Kerberos"
		Advisor: Asst. Prof. Apinetr Unakul
		GPA: 3.85/4.00

Bachelor Degree	1997 - 2001	**B. Eng. in Computer Engineering (PSU, Songkla)**
		GPA: 3.30/4.00

RESEARCH INTERESTS

Blockchain, Smart Contract, Peer-to-Peer network, Distributed system, Software, Web and Mobile Development, DevOps, Security

Blockchain and smart contract

Web and mobile development, DevOps

Network architecture, P2P

RESEARCH PROJECTS

Blockchain and Smart contract, Decentralized Financial,

Distributed Network Technology and Security

APPOINTMENT

Executive experiences:

2021 Associate Dean for Research and Innovation, CoC, PSU, Phuket Campus

2020 Head of BLOCK Research Team, CoC, PSU, Phuket Campus

2019 Assistant to the President for IT, PSU, Phuket Campus

2018 Assistant to the President for Strategic Planning and Technology, PSU, Phuket Campus

2017 Head of PSU Phuket WiFi working group

2016 Deputy head of technical and operation on ACM/ICPC World Finals

2013-2015 Associate department head for administration at the Computer Engineering Department, Faculty of Engineering

2013-2014 Deputy head of Information engineering for Andaman Region (INFAR) research team

Work experiences:

Nov 2012 – Present Lecturer at Computer Engineering Department, PSU

Dec 2005 – Sep 2008 Lecturer at Computer Engineering Department, PSU

Apr 2003 – Apr 2005 System Administrator at School of Graduate Studies, KMITL

Apr 2001 – Apr 2002 Lecturer at Computer Engineering Department, PSU

Apr 2000 – Sep 2000 Project engineering at MA Consulting Services PTE LTD, Singapore

TEACHING

Teaching Class / Undergraduate level:

- Blockchain and Smart Contract Development, 2021 - Now

- Distributed computing and web technologies (React.JS and Node.JS), 2013 - Now

- Telecommunication, Wireless, and Mobile Networking, 2004 - Now

- Computer Engineering Project and Laboratory, 2000 - Now

- Software development methodologies (Android), 2016-2018

- Broadband High-Speed Network, 2002-2008

- Introduction to Communication Systems and Networks, 2002-2008

- Introduction to Computer Networks, 2000-2007

- Object-oriented Programming, 2000-2008

- Data Structure and Computer Programming Techniques (C & C++), 2000-2008

- Introduction to Computer Programming (C & C++), 2000-2008

MSc/PhD Students

Ongoing master's degree students: 2565 - presently

Mr. Nattawat Songsom: The SWC-based Security Analysis Tool for Smart Contract Vulnerability Detection

Mr. Suppanat Laddayam: Cryptocurrency price prediction models with machine learning

Miss Sawanya Rattanabunno: An EOA Identity Tracing System (AITS) on Ethereum Blockchain

Mr. Naratorn Boonpeam: 2563 - 2565

 Topic: Arbitrage Opportunities and Decentralized Finance System

Mr. Tanakorn Karode: 2562 - 2564

 Topic: Blockchain-based Online Review System

Mr. Piyawit Tantisakornket: 2559 - 2561

 Topic: Scalable Video Coding Multicast over Software-Defined Networking

INTERNATIONAL JOURNAL ARTICLES

W. Werapun, T. Karode, T. Arpornthip, J. Suaboot, E. Sangiamkul, P. Boonrat, (2023). The Flash Loan Attack Analysis (FAA) Framework—A Case Study of the Warp Finance Exploitation. *Informatics - MDPI* 2023, Vol*10, issue 1(March 2023)*, pp. 1-22, https://doi.org/10.3390/informatics10010003, ISSN-2227-9709 (Scopus Q1)

🗓 *1/2023*   🔖 *Flash loan attack, Cryptocurrency, DeFi, TWAP*

W. Werapun, T. Karode, J. Suaboot, T. Arpornthip, E. Sangiamkul, (2023). NativeVRF: A Simplified Decentralized Random Number Generator on EVM Blockchains. *Systems- MDPI* 2023, Vol *11, issue 7(June 2023)*, pp. 1-22, Wos-SCIE Q1

🗓 *7/2023*   🔖 *blockchain*

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. Link: http://dx.doi.org/10.1504/IJIPT.2023.10058807

🗓 *1/2023*   🔖 *SDN*

N. Boonpeam, **W. Werapun**, T. Karode, and E. Sangiamkul, "The Automated Equity-Split Cryptocurrency Arbitrage Strategy", Songklanakarin Journal of Science and Technology, pp. 845-851, Vol.44, No.3, May - Jun 2022, **DOI:** 10.14456/sjst-psu.2022.113, Scopus Q3

🗓 *6/2022*   🔖 *blockchain, Arbitrage, Cryptocurrency*

T. Karode and **W. Werapun**, "Robustness against fraudulent activities of a blockchain-based online review system", Peer-to-Peer Networking and Applications, Spinger Nature, IF (2020) 3.07, E-ISBN 1936-6450, P-ISBN 1936-6442, Vol 15, Issue 1, ISI Q2, Pages 92 - 106, 23 Aug 2021, https://doi.org/10.1007/s12083-021-01225-z

🗓 *8/2021*   🔖 *P2P, blockchain, review*

T. Karode, **W. Werapun**, T. Arporntip, "Blockchain-based Global Travel Review Framework", The International Journal of Advanced Computer Science and Applications (IJACSA), Volume 11, Issue 8, pp. 90-99, DOI: 10.14569/IJACSA.2020.0110813, August 2020 (ISI / Scopus Index)

🗓 *8/2020*   🔖 *IJACSA, blockchain, review*

W. Werapun, T. Arpornthip, E. Sangiamkul, R. Wetprasit, and T. Karode, (2020). A Blockchain-based Renewable

[Energy Investment Management Platform](#): Decentralized Sustainable Development (DeSDev). *Journal of Computer Science*, *16*(11), pp. 1657-1668. https://doi.org/10.3844/jcssp.2020.1657.1668

📅 *11/2020* 🔖 *blockchain, distributed, solar*

W. Werapun, A. Kamhang and A. Wachiraphan, "Design of Home Automation Framework with Social Network Integration", Frontiers in Artificial Intelligence and Applications, Volume 275, 2015, Pages 219-226, DOI: 10.3233/978-1-61499-503-6-219, Publisher:IOS Press, ISSN:0922-6389, E- ISSN:1535-6698, (SCOPUS Indexing)

📅 *2/2015*

A. Heednacram, **W. Werapun**, "Java Predictors for Water Level Forecast Based on Daily Gage Height", Advanced Materials Research (AMR), vol. 931-932, pp. 839-843, 2014. (ISBN: 978- 3-03835-090-3, DOI:10.4028/ www.scientific.net/AMR.931-932.839, ISI & SCOPUS Indexing).

📅 *5/2014*

W. Werapun, J. Fasson, B. Paillassa, "Convergence Architecture for Home Service Communities", International Journal of Computer Science and Application (IJCSA), Volume 2 Issue 4, PP.70-77, ISSN Print: 2324-7037, ISSN Online: 2324-7134, November 2013.

📅 *11/2013*

INTERNATIONAL PROCEEDINGS

Sawanya Rattanabunno, **Warodom Werapun,** Jakapan Suaboot, Maneenate Puongmanee, Tanakorn Karode, [An EOA Identity Tracing System (AITS) on Ethereum Blockchain](#), The 8th International Conference on Information and Network Technologies (ICINT 2023), pp 61-65, 19-21 May 2023, Tokyo, Japan, DOI:[10.1109/ICINT58947.2023.00019](#)

📅 *5/2023* 🔖 *blockchain, Ethereum*

Warodom Werapun, Nattawat Songsom, Tanakan Khongfai, Ayuth Intrapradit, Jakapan Suaboot, Andaman Token: [A Feasibility Study of Blockchain Adoption in the Tourism Industry](#), The 14th International Conference on ICT Convergence (ICTC 2023), Oct 2023, Jeju, Korea

📅 *10/2023* 🔖 *blockchain, token*

Sawanya Rattanabunno, **Warodom Werapun**, "Decrypting Criminal Transaction Patterns in Cryptocurrency," The 7th International Conference on Information Technology (InCIT2023), pp. 460-464, 15-17 Nov 2023, Chiangrai, Thailand

📅 *11/2023* 🔖 *blockchain, cryptocurrency*

Tadiwa Vhito, Jakapan Suaboot, **Warodom Werapun**, Thitinan Kliangsuwan, "Effects of Malware Detection Parameters on Classical Vs Deep ML Techniques," The 7th International Conference on Information Technology (InCIT2023), pp. 465-470, 15-17 Nov 2023, Chiangrai, Thailand

📅 *11/2023* 🔖 *malware*

Nattawat Songsom, **Warodom Werapun**, Jakapan Suaboot, Norrathep Rattanavipanon, "The SWC-Based Security Analysis Tool for Smart Contract Vulnerability Detection,"?The 6th International Conference on Information Technology?(InCIT) 2022, 10-11 November 2022, Bangkok, Thailand.

📅 *11/2022* 🔖 *blockchain, smart contract, swc, vulerability*

N. Boonpeam, **W. Werapun** and T. Karode, "The Arbitrage System on Decentralized Exchanges", The 18th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2021), pp. 768-771, 19-22 May 2021

📅 *5/2021* 🔖 *blockchain, Arbitrage, DeFi*

T. Karode, **W. Werapun**, "Performance Analysis of Trustworthy Online Review System using Blockchain", The 17th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2020), pp. 510-513, 24-27 June 2020

📅 *6/2020* 🖉 *https://ecticon2020.ecticon.org/, blockchain, review*

N. Boonpeam, **W. Werapun**, T. Karode, "Student Activity Credit Framework (PSUCOIN)", The 5th International Conference on Information Technology: InCIT2020, pp. 249-253, 21-22 October 2020 (IEEE Library)

📅 *10/2020* 🖉 *blockchain*

T. Karode, **W. Werapun**, "[A Case Study of Route Optimisation for Phuket Healthy Drink Delivery System](#)", 2019 23rd International Computer Science and Engineering Conference (ICSEC), pp. 7-11, 30 Oct- 1 Nov 2019

📅 *10/2019* 🖉 *Route Optimization*

W. Werapun, W. Srimala, K Chaowanawatee, T. Karode, "Smart Logistics Framework: A Case Study of Phuket RO Water System", The 2018 4th International Conference on Innovation and Industrial Logistics (ICIIL2018), Bangkok, Thailand, pp. 1-5, Aug 2018 (SCOPUS indexing)

📅 *8/2018*

W. Werapun, K. Chaowanawatee, "LoRa Smart Parking for Phuket Smart City", The 8th PSU-UNS International Conference on Engineering and Technology (ICET-2017), Novi Sad, Serbia, June 8-10, 2017 (**Best Paper Award**)

📅 *6/2017*

P. Tantisarkhornkhet, **W. Werapun**, Beatrice Paillassa, "SDN Experimental on the PSU Network", The 2016 International Symposium on Intelligent Signal Processing and Communication Systems (ISPAC 2016), Phuket, Thailand, 24-27 Oct 2016, (IEEE Indexing)

📅 *10/2016*

P. Tantisarkhornkhet, **W. Werapun**, "QLB: QoS Routing Algorithm for Software-Defined Networking", The 2016 International Symposium on Intelligent Signal Processing and Communication Systems (ISPAC 2016), Phuket, Thailand, 24-27 Oct 2016, (IEEE Indexing)

📅 *10/2016*

W. Werapun and J. Suaboot, "Data Integrity for Energy Measurement of Sensor Nodes as Home Services," 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*

W. Werapun, Apichat Heednacram, "A Case Study of Home Service Sharing Using RELOAD", Proceedings of the 8th IASTED International Conference on Advances in Computer Science (ACS2013), pages 351-356, Phuket, Thailand, April 10 – 12, 2013 (SCOPUS indexing).

📅 *4/2013*

W. Werapun, Julien Fasson and Béatrice Paillassa, Home Service Communities and Authentication, Internal Joint Conference of IEEE TrustCom-11/IEEE ICESS-11/FCST-11, China, Nov 2011 (SCOPUS Indexing).

📅 *11/2011*

W. Werapun, J. Fasson, B. Paillassa, "Network Architectures for Ubiquitous Home Services", The Fourth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, UBICOMM 2010, Oct 2010 (SCOPUS Indexing).

📅 *10/2010*

W. Werapun, A. Abou El Kalam, B. Paillassa, J. Fasson, "Solution Analysis for SIP Security Threats", International

Conference on Multimedia Computing and Systems, ICMCS 2009, Apr 2009 (SCOPUS Indexing).

🗓 *4/2009*

W. Werapun, K. Thavornvisit, "Performance Comparison of TCP and CBR in MAODV Ad hoc Network", The Second International Conference on Systems and Networks Communications, ICSNC 07, Aug. 2007 (SCOPUS Indexing).

🗓 *8/2007*

W. Werapun, A. Unakul, "An Experimental Mobile IPv6 Simulation using NS-2 Mobiwan", NS-2 Network Simulation Workshop 2004, Nov. 2004

🗓 *11/2004*

W. Werapun, A. Unakul, "Secure Mobile IPv6 Binding Updates with Identity-based Signature", Information and Computer Engineering Postgraduate Workshop 2003, Jan. 2004

🗓 *1/2004*

W. Werapun, A. Unakul, "An Experimental Mobile IPv6 for Linux Testbed System", National Computer Science and Engineering Conference, NCSEC 2003, Oct. 2003

🗓 *10/2003*

CHAPTERS

Béatrice Paillassa, Julien Fasson, **Warodom Werapun**, Chapter 8 - Service Management, In: Digital Home Networking, Romain Carbou, Michel Diaz, Ernesto Exposito, Rodrigo Roman (Eds.), ISTE-WILEY, 8, p. 259-306, ISBN: 978-1-118-60298-0, 1, 2011 (SCOPUS Indexing)

🗓 *1/2011*

REPORTS

- Warodom Werapun, Julien Fasson, Béatrice Paillassa, Mohamed Mahdi, Olivier Dugeon, Marta Bel Martin, Feel@Home CELTIC Project Deliverable D6.2.2 Extended Home Delivery Specifications, Rapport de recherche, D6.2.2, IRIT, Sep 2010
- Warodom Werapun, Julien Fasson, Béatrice Paillassa, Mohamed Mahdi, Olivier Dugeon, Marta Bel Martin, Feel@Home CELTIC Project Deliverable D6.2.1 Extended Home Delivery Definition & Requirements. Rapport de contrat, D6.2.1, IRIT, Sep 2009

TRAINING

Invited speakers and workshops

2023	Unlocking the potential of immersive technology to live a better life: 8-10 Aug 2023, Bali, Indonesia
2023	Digital Currency and Blockchain: 18 March 2023
2022	Blockchain and DeFi workshop: 19 Oct 2022
2021	Blockchain and DeFi workshop: 3-4 April 2021
2021	Scratch workshop (Block programming): 27 Mar 2021
2020	Blockchain and cryptocurrency for master students: Phuket Rajabhat University: Sep-Oct 2020
2020	MS Team workshop for online teaching: Prince of Songkla University, Phuket
2019	Blockchain workshop and Smart contract: Kasetsart university (20 Dec 2019)

2019   Introduction to Blockchain and Smart contract: RUN@Chulalongkorn University (26 July 2019)

2018   Thunkable X for Android Application: Phuket Witayalai School

2018   Android Application Development: Taksin University and Rajabhat University

2017   Android Application Development": Code Phuket

2017   Introduction to Internet of Things (IoT): Networking Technology

2016   Big Data (Hadoop) Training

2015   Mobile Application Development / Android Programming

2015   Test-Driven Development (TDD)

2015   Java Thread 2557

2014   Libre Office Workshop 2556

OTHERS

BLOCKCHAIN WORK-RELATED

- Finstable Technical Advisory (2020 - Present)

- Head of **BLOCK** Research Team, College of Computing, PSU, Phuket Campus 2020 (2020 - 2023)

- อนุกว.รายสาขา คณะที่ 68/3 เทคโนโลยีบล็อกเชน (ISO/DTR 23644 Blockchain and distributed ledger technologies (DLTs) (2021-Present)

Associate Editor

- JOURNAL OF INFORMATION SCIENCE AND TECHNOLOGY

CONFERENCE REVIEWER / PROGRAM COMMITTEE

- วารสารบริหารธุรกิจ เศรษฐศาสตร์และการสื่อสาร

- The 7th International and the 15th National Conference on Information Technology (InCIT 2023 and NCIT 2023)

- The 27th International Computer Science and Engineering Conference 2023 (ICSEC 2023)

- Songklanakarin Journal of Science and Technology (SJST), 2021

- The 2021 IEEE 18th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2021)

- The 2016 International Symposium on Intelligent Signal Processing and Communication Systems

- The 8th National Conference Information Technology (NCITT 2016)

- The 29th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2014)

- Proceedings of the 8th IASTED International Conference on Advances in Computer Science (ACS2013)

- The 13th International Symposium on Communications and Information Technologies (ISCIT 2013)

- Proceedings of the 1st Annual PSU Phuket International Conference 2012, Prince of Songkla University, Phuket, Thailand, 2013

- Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI)

- Conference on Application Research and Development (ECTI-CARD 2009)

LEADERSHIP EXPERIENCES

- Associate Dean for Research and Innovation, College of Computing, PSU, Phuket, Oct 2021 - Present

- Assistant to the President for Information and Technology, PSU, Phuket Campus 2019

- Assistant to the President for Strategic Planning and Technology, PSU, Phuket Campus 2018

- Head of PSU Phuket WiFi working group 2017

- Deputy head of technical and operation at ACM/ICPC World Finals 2016

- Associate department head for administration at the Computer Engineering Department, Faculty of Engineering 2013-2015

- Deputy head of Information engineering for Andaman Region (INFAR) research team 2013-2014

 CERTIFICATES

- MCTNA: MikroTik Certified Network Associate

- CCNA: Cisco Certified Network Association

- SCJP 5.0: Sun Certified Programmer for the Java 2 Platform 5.0

- SCJP: Sun Certified Programmer for the Java 2 Platform 1.4

- MCP: Microsoft Certified Professional

- MCAD: Microsoft Certified Application Developer

RESEARCH GRANTS

นวัตกรรมการพัฒนาโมเดลธุรกิจการท่องเที่ยวด้วยการสร้างโทเคนบนระบบบล็อกเชน

: 350,000 baht funded by Fundamental Fund : FF66 (NSRF) สำนักงานคณะกรรมการส่งเสริมวิทยาศาสตร์ วิจัยและนวัตกรรม (สกสว.), 2023

📅 *2023*

Model Driving Phuket to a Wellness Tourism City

: 5,000,000 baht funded by PMU-A (หน่วยบริหารและจัดการทุนด้านการพัฒนาระดับพื้นที่), 2021- 2022

📅 *2021*

Blockchain consultant for Credit Scoring and Andaman Token

: 406,000 baht funded by Finstable Co.Ltd., 2021- 2022

📅 *2021*

Blockchain knowledge sharing for local people

: 947,700 baht funded by TSRI, 2020- 2022

📅 *2020*

BLOCK research team

: 750,000 baht funded by College of Computing, PSU, Thailand, 2020- 2023

📅 *2020*

Blockchain-based Online Review System

: 356,000 baht funded by PSU, Thailand for a master degree student, 2019- 2021

📅 *2019*

The Energist#2 Blockchain pitching

: 30,000 baht funded by Ministry of Energy (EPPO), 2019

📅 *2019*

UReka by SCB Digital Venture (DeSDev)

: 200,000 baht funded by SCB Digital venture, 2019

📅 *2019*

4.0 Tourism Volunteer Service System

4.0 Volunteer service system is an innovative web-based platform that aims to match between tourists and volunteers in Phuket City.

: 2,000,000 baht funded by PSU, Thailand, 2018- 2020

📅 *2018*

Automatic LED Light Bulb Testing for Prince of Songkla University, Phuket Campus

: 100,000 baht funded by PSU Phuket, Thailand, 2018

📅 *2018*

Phuket RO Water System:

Phuket RO Water System is a system that provides smart logistics and transportation including stock management for Phuket smart city.

: 1,490,000 baht funded by TRF, Thailand, 2017- 2018

📅 *2017*

Home automation framework

Home automation framework is a system that automatically controls appliances (e.g., air conditions) or remotes access to monitor their status via mobile phones for Phuket smart-university.

: 70,000 baht funded by PSU, Thailand,, 2016

📅 *2016*

AWARDS

Awards

Top-3 teams, [Aleo Hackathon](), zkSingapore from TOKEN2049, Singapore, 14 Sep 2023, 600 USD, Funded by Aleo

[New Gen Energy Research Showcase](), PSUCC (Blockchain Based Carbon Credit Platform), 40,000 Baht, Funded by EPPO (กระทรวงพลังงาน), Sep 2023

[Top-3 Teams, AGTech](([DURICO]()) 100,000 Baht, Funded by [NIA](), Sep 2023

รางวัลบุคลากรดีเด่น ประจำปี 2565 สายวิชาการ สาขาวิทยาศาสตร์และเทคโนโลยี วิทยาลัยการคอมพิวเตอร์

รางวัลยกย่องเชิดชูเกียรติพี่เลี้ยงอาจารย์ใหม่ ประจำปี 2565

Researcher awards (at https://pride.psu.ac.th)

- รางวัลนักวิจัยดีเด่น ประจำปี 2564 / CoC Outstanding researcher - 2022

- รางวัลนักวิจัยดีเด่น ประจำปี 2563 / CoC Outstanding researcher - 2021

Thesis award 2022

นายธนากร ก้าโหรด สาขาวิชาการคอมพิวเตอร์ (หลักสูตรนานาชาติ) ที่ได้รับรางวัลระดับเกียรติคุณ สาขาวิชาวิทยาศาสตร์กายภาพ ในรางวัลวิทยานิพนธ์ดีเด่นนักศึกษาระดับบัณฑิตศึกษาประจำปี 2564 คัดเลือกโดยบัณฑิตวิทยาลัย มหาวิทยาลัยสงขลานครินทร์ วิทยานิพนธ์เรื่อง "การใช้งานบล็อกเชนกับระบบรีวิวออนไลน์" (Blockchain-based Online Review System) อาจารย์ที่ปรึกษาโดย ผู้ช่วยศาสตราจารย์ ดร.วโรดม วีระพันธ์

National Software Contest (NSC) 2022

Merit Award 2022

- PCORD (https://www.facebook.com/CoC.Admission/photos/4660130814109706/)

APICTA Merit Awards 2021 (International Software Contest)

- PSU COIN

National Software Contest (NSC) 52,000 baht funded by NECTEC

won "The first runner-up award from NSC" x 4 times:

- The Arbitrage System, 2021

- PSU COIN, 2020

- HTTP Load Test Tool (HLTT), 2017

- The Ultimate Programming System (TUPS), 2016

Thailand ICT Award 2020 (TICTA2020)

won "The first runner-up award":

- PSU COIN, 2020

ICET-2017 conference
Best paper award
- LoRa Smart Parking for Phuket Smart City, Serbia, 2017

Scholarships
- Full scholarship for Ph.D. Eng. by department of computer engineering, Prince of Songkla University Thailand
- Couverture Sociale scholarship for M2R IT and Ph.D. Eng by CROUS, French Government
- Full scholarship for M. Eng. by department of computer engineering, Prince of Songkla University Thailand

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