

PERSONAL DATA



Name : ASSOCIATE PROFESSOR AZIZ NANTHAAMORNPHONG
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PUBLICATIONS SUMMARY

157

International Journal

33

International. Proceedings

6

National. Proceedings

3

Chapters

5

Research Grants

Total Publications: 204

EDUCATION

Ph.D. Degree	2014	Computer Science (Ph.D.), The University of Alabama, USA
Master Degree	2002	Information Technology (M.Sc.), Kasetsart University, Bangkok, Thailand
Bachelor Degree	1999	Industrial Engineering (B.Eng.), Thammasat University, Bangkok, Thailand

RESEARCH INTERESTS

I am particularly interested in data science in software engineering, including software analytics, data analytics in open source software, social analytics. I also do research on software engineering practices in scientific software development. For example, agile methods, test-driven development, design patterns. My research extends to empirical software engineering, software quality, software maintenance, software development process, software architecture, and reverse engineering.

Agile Methodologies

Data Science in Software Engineering

Empirical Software Engineering

RESEARCH PROJECTS

Marketing Channel Development for Wellness Spa in Southern Thailand

Aziz Nanthaamornhong, <http://southernspa.info/home/login>

City Data Platform (CDP) - Phuket Smarty City Platform

Co-working with City Data Analytics Co., Ltd. and Digital Economy Promotion Agency (depa)

ForUML – Extraction the UML diagrams from Modern FORTRAN.

Nanthaamornphong, A., Carver, J., Morris, K., & Filippone, S. (2015). *Extracting UML class diagrams from object-oriented Fortran: ForUML Scientific Programming, 2015*

Nanthaamornphong, A., & Leatongkam, A. (2017). *Modern Fortran Transformation Rules for UML Sequence Diagrams. Journal of Telecommunication, Electronic and Computer Engineering (JTEC), 9(3-4), 131-136.*

Squirrel – The code snippet repository system

Nanthaamornphong, A., Pomwong, S., Klebkaew, K., & Jindamanee, N. (2017). *Squirrel: A Code Snippet Repository. Journal of Telecommunication, Electronic and Computer Engineering (JTEC), 9(3-3), 73-77.*

OSS Analytic – Analyze the code smell in OSS projects

Nanthaamornphong, A., & Chaisutanon, A. (2016, September). *Empirical evaluation of code smells in open source projects: preliminary results. In Proceedings of the 1st International Workshop on Software Refactoring (pp. 5-8). ACM.*

ZSmell – The code smell detection tool integrated with GitHub

APPOINTMENT

Dean of College of Computing (October 2021 - Present)

Vice-Dean of Research, Post-Graduate, and Academic Services (June 2018 - Present)

Chair of Master of Science in Information Technology Degree Program (May 2014 - 17 October 2018)

TEACHING

Lecturer

- **Service Oriented Architecture** (Undergraduate level) - 2018 (1st semester)
- **R Programming** (Graduate level) - 2018 (2nd semester)
- **Statistics for Information Technology** (Graduate level) - 2015 (1st semester), 2016 (1st semester), 2017 (1st semester)
- **Advanced Empirical Software Engineering** (Graduate level) - 2015 (2nd semester), 2016 (2nd semester)
- **Software Construction and Maintenance** (Undergraduate level) - 2014 (1st semester), 2015 (1st semester), 2016 (1st semester)
- **Advanced Object-Oriented Programming** (Undergraduate level) - 2014 (2nd semester), 2015 (2nd semester)
- **Software Architecture** (Undergraduate level) - 2014 (2nd semester), 2016 (2nd semester)
- **Component-Based Software Development** (Undergraduate level) - 2014 (2nd semester), 2017 (1st semester)

Guest Lecturer

- **Software Quality Assurance** (Undergraduate level) - 2009 (1st semester)
- **Object-Oriented Analysis and Design** (Undergraduate level) - 2007 (1st semester) 2008 (1st semester)
- **Software Architecture** (Undergraduate level) - 2007 (2nd semester), 2008 (2nd semester)

MSc/PhD STUDENTS

PhD Students

- Kulsiri Jirayoot (current)
- Nichapat Sangkaew (current)
- Sawitree Srianan (current)
- Nattapat Luenglerpaiboon (current)

Master Students

- Apatta Chaisutanon (graduated 5/2017)
- Suchada Pongphom (graduated 5/2017)
- Thanyarat Kitpanich (graduated 7/2018)
- Anawat Leatongkam (graduated 7/2018)
- Ton Jaitong (graduated 7/2022)

TRAINING

- **Introduction to Data Science**, Bangkok, Thailand, June 2-3, 2016
- **Agile Workshop**, Bangkok, Thailand, 3-5 April, 2015
- **Object-Oriented Programming in Fortran**, University of California at Berkeley, California, USA, 03/2012
- **Evaluating Software Architecture**, Software Park, Bangkok, Thailand, 05/2008
- **Software Project Estimation and Measurement**, Software Park, Bangkok, Thailand, 11/2007
- **Project Management for CMM**, Compulink System Ltd., Pune, India, 06/2005

OTHERS

INDUSTRY WORK EXPERIENCE

Executive System Analyst, Software Industry Promotion Agency (SIPA), Ministry of Information and Communication Technology, Phuket branch, Thailand, 2005-2009

Project Leader, Northstar Infosys Co., Ltd., Bangkok, Thailand, 2002-2005

Junior Developer, Drumbeat Digital (Thailand) Co., Ltd., 2001-2002

PROFESSIONAL ACTIVITIES

Conference Organizers

- Special Session Chair of the 18th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2021)
- Publication Chair of the 18th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2021)
- General Chairs of the 17th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2020)
- General Co-Chairs of the 23rd International Computer Science and Engineering Conference (ICSEC 2019)

Conference/Workshop Program Committees

- International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2020 - 2021
- International Computer Science and Engineering Conference (ICSEC), 2019
- The International Joint Conference on Computer Science and Software Engineering, 2018
- International Conference on Enterprise Architecture and Information Systems, 2018
- International Conference on Computing and Information Technology, 2018
- The 2nd International Conference on Information Technology, 2017
- The National Conference on Information Technology, 2015 - 2021

- The 2nd International Conference on Enterprise Architecture and Information Systems, 2017
- The National Conference on Computing and Information Technology, 2015 - 2018
- The 2015 Workshop on Software Engineering, 2015
- Empirical Software Engineering and Measurement, 2012-2014
- The 3rd Annual PSU Phuket International Conference, 2014
- Asia-Pacific Workshop on Software Engineering for Computational Science and Engineering, 2013
- International Symposium on Software Reliability Engineering, 2013
- International Workshop on Replication in Empirical Software Engineering Research, 2013
- The 50th ACM Southeast Conference, 2012

Conference/Workshop Session Moderator

- The 10th Malaysian Software Engineering Conference, 2017
- The 2015 Workshop on Software Engineering, 2015
- The 7th National Conference on Information Technology, 2015

Journal Reviewers

- IEEE Transaction on Software Engineering
- Software Quality Journal
- Journal of Software : Evolution and Process
- Information and Software Technology
- Computing in Science & Engineering
- Journal of Software: Practice and Experience
- Institute of Electronics, Information and Communication Engineers
- International Journal of Web Information Systems

INTERNATIONAL JOURNAL ARTICLES

Patil, M., Radhakrishnan, P., Manjunatha, B., Krishnamoorthy, R. & **Nanthaamornphong, A.** (2026). Hybrid spectrum sensing framework for optical OTSM waveform in 5G visible light communication systems. *Journal of Optical Communications*. <https://doi.org/10.1515/joc-2026-0076>

📅 4/2026

DebBarman, S., Namrata, K., Gupta, M., Suanpang, P., & **Nanthaamornphong, A.** (2026). Machine learning and time–frequency feature framework for optimal DER planning in radial networks. *Egyptian Informatics Journal*, *33*, 100928.

<https://doi.org/10.1016/j.eij.2026.100928>

📅 3/2026

Patil, M., Sampath, R., Karthigaiveni, S., Gowrishankar, V., Kumar, A. & **Nanthaamornphong, A.** (2026). Low-complexity hybrid PAPR reduction technique for optical OFDM-based VLC systems. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2026-0049>

📅 3/2026

Bhaskar, N., Bairagi, V., **Nanthaamornphong, A.**, Dale, M., & Jadhav, S. T. (2026). Design and implementation of an artificial intelligence–enabled auto-adaptive modular drone for real-time surveillance applications. *Engineered Science*, *39*, 2045.

<https://doi.org/10.30919/es2045>

📅 2/2026

Kumar, A., Gaur, N., & **Nanthaamornphong, A.** (2026). Supervised RNN-PTS framework for PAPR reduction and performance optimization in optical OTSM-VLC systems. *Results in Optics*, *23*, 100992.

<https://doi.org/10.1016/j.rio.2026.100992>

A. Kumar, V. Revathi, P. C. Pradhan, J. K. Baruah, N. Gaur, and A. **Nanthaamornphong**, “Low-Complexity EP-Net-Based Signal Detection for High-Mobility MIMO-OTFS Systems Over Rayleigh and Rician Channels”, *IJASIS*, pp. 545–560, Jan. 2026, doi: [10.29284/6s1v3w36](https://doi.org/10.29284/6s1v3w36).

<https://xlscience.org/index.php/IJASIS/article/view/919>

Behera, S., Murali Krishna Muktinutalapati, M., Sethy, P., Varma, N., **Nanthaamornphong**, A. & Smerat, A. (2026). Assessment of nutrient deficiency of rice plant based on modified ResNet50. *Open Life Sciences*, 21(1), 20251281.

<https://doi.org/10.1515/biol-2025-1281>

Kumar, A., Gaur, N. & **Nanthaamornphong**, A. (2025). Enhanced PAPR reduction in NOMA systems using modified SLM and PTS techniques for power-efficient 5G and beyond networks. *Open Engineering*, 15(1), 20250153.

<https://doi.org/10.1515/eng-2025-0153>

Chand, L., Gupta, M., Alenizi, F. A., Alias, N., Suanpang, P., & **Nanthaamornphong**, A. (2026). An artificial computational procedure for the nonlinear diarrhea disease system with the effects of treatment and vaccination. *Advanced Theory and Simulations*, 9(1), e02096.

<https://doi.org/10.1002/adts.202502096>

Raj K, S., Parepalli, R., Kumar, A., Bobade, S. D., & **Nanthaamornphong**, A. (2026). Improved signal throughput in optical OFDM using hybrid optimization algorithms. *Journal of Optical Communications*, 2025, 1-9.

<https://doi.org/10.1515/joc-2025-0523>

Revathi, V., Tagare, T. S., Chakravarty, S., Baruah, J. K., Kumar, A., & **Nanthaamornphong**, A. (2026). Comparative analysis of RF semi-quantum key distribution (QKD) under noisy RF channels. *Journal of Optical Communications*, 2026, 1-9

<https://doi.org/10.1515/joc-2025-0512>

Kumar, A., Gurulakshmi, A., Chandra Pradhan, P., Ramakrishna, D. & **Nanthaamornphong**, A. (2026). Optical signal processing and VLSI system design for 5G radio for advanced waveforms. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0467>

Kumar, A., Masud, M., Saini, A. K., & **Nanthaamornphong**, A. (2026). Reducing the peak-to-average power ratio for NOMA waveform with diverse channel using micro genetic algorithm-based partial transmission sequence algorithm. *EURASIP Journal on Wireless Communications and Networking*, 2026(1), 24.

<https://doi.org/10.1186/s13638-025-02566-6>

Kumar, A., Aswatha, A., AB, K., Raja, C., Chakravarty, S. & **Nanthaamornphong**, A. (2025). An optical network emulation framework for underwater communication using AFDM. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0481>

Hiremath, M., Revathi, V., Kumar, A., Chandra Pradhan, P. & **Nanthaamornphong**, A. (2025). A hybrid deep learning and companding technique for distortion-resilient optical NOMA VLC with 1024-QAM modulation. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0494>

Baisakh, B., Sethy, P. K., Gupta, R., Behera, S. K., & **Nanthaamornphong**, A. (2025). *A hybrid machine vision*

and handcrafted features fusion based approach for fine-grained millet classification. *Scientific Reports*, 16(1), Article 2578.

🔗 <https://doi.org/10.1038/s41598-025-32311-4>

📅 12/2025

Kunwar, F., Shukla, S., Singh, S., Dhanke, J., Gurulakshmi, A. & **Nanthaamornphong, A.** (2025). Neural network-based peak power and throughput analysis of optical OFDM waveforms with 1024-QAM for high-capacity computer networks. *Journal of Optical Communications*.

🔗 <https://doi.org/10.1515/joc-2025-0423>

📅 11/2025 📄 *Journal of Optical Communications*

Chilakarao, M., Behera, S. K., Raju, K. P., Dash, P. P., Sethy, P. K., & Nanthaamornphong, A. (2025). Domain-aligned feature extraction with Mobilenetv2-GRL and KNN for wheat leaf disease detection. **Results in Engineering**, 28, 108118.

🔗 <https://doi.org/10.1016/j.rineng.2025.108118>

📅 11/2025 📄 *Results in Engineering*

Radhakrishnan, P., Kandula, S., Hussain Sharief, A., Sharma, K., Kuma, A. & **Nanthaamornphong, A.** (2025). Autoencoder-driven PTS for power optimization of optical-NOMA waveform amplifiers. *Journal of Optical Communications*.

🔗 <https://doi.org/10.1515/joc-2025-0434>

📅 11/2025 📄 *Journal of Optical Communications*

Kumar, A., Gaur, N., & **Nanthaamornphong, A.** (2025). Reducing the peak to average power ratio of UPMC waveform for beyond 5G system using hybrid SLM+PTS+RNN algorithms. **IET Communications**, 19(1), e70117.

🔗 <https://doi.org/10.1049/cmu2.70117>

📅 11/2025 📄 *IET Communication*

Patel, K., Sarathamani, T., Kothandasamy, K., Sethy, P. K., Behera, S. K., & **Nanthaamornphong, A.** (2025). Computational approaches to neurological disorder diagnosis: An in-depth review of current methods and future prospects. *Current Medical Imaging*, 21, 1–38.

🔗 <https://doi.org/10.2174/0115734056404224251026110800>

📅 11/2025 📄 *Current Medical Imaging*

Kumar, A., Gaur, N., & **Nanthaamornphong, A.** (2025). A comprehensive review on 6G advanced techniques and challenges for rural health care system. *Journal of Internet Services and Information Security*, 15(4), 693–708.

🔗 <https://doi.org/10.58346/JISIS.2025.14.050>

📅 11/2025

Kumar, A., **Nanthaamornphong, A.**, Gaur, N., & Masud, M. (2025). Low complexity hybrid algorithm for improving PAPR, BER, and PSD in OTFS under diverse channel conditions. *Scientific Reports*, 15(1), 42023.

🔗 <https://doi.org/10.1038/s41598-025-26748-w>

📅 11/2025 📄 *Scientific Reports*

Kumar, A., **Nanthaamornphong, A.**, Alsharif, M. H., Masud, M., & Meshref, H. (2025). Cognitive radio and spectrum sensing techniques for sustainable marine ecosystem monitoring. *Frontiers in Marine Science*, 12.

🔗 <https://doi.org/10.3389/fmars.2025.1702294>

📅 11/2025

Kumar, A., Chakravarty, S., & **Nanthaamornphong, A.** (2025). Simultaneous wireless information and power transfer along with beamforming. *Journal of the Chinese Institute of Engineers*, 1–14.

🔗 <https://doi.org/10.1080/02533839.2025.2557224>

📅 10/2025 📄 *JOURNAL OF THE CHINESE INSTITUTE OF ENGINEERS*

Kumar, A., Aswatha, A., Ashok, K., Ramakrishna, D. & **Nanthaamornphong, A.** (2025). Performance analysis of FSO OFDM for 256-QAM scheme under optical diverse channel. *Journal of Optical Communications*.

🔗 <https://doi.org/10.1515/joc-2025-0340>

Kumar, A., Patil, R., Devanna, H. & **Nanthaamornphong, A.** (2025). Optimizing power amplifier efficiency through PAPR reduction in optical FBMC for VLC applications. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0346>

Behera, S. K., Varma, P. B. S., Teresa, V. V., Das, K., Sethy, P. K., & **Nanthaamornphong, A.** (2025). Thermal vision for lady finger quality assessment: A three-stage convolutional neural network approach. *International Journal of Food Science and Technology*, 60(2), vvaf171.

<https://doi.org/10.1093/ijfood/vvaf171>

Shrivastav, A., Meharunnisa, S., Atti, S., Kumar, A. & **Nanthaamornphong, A.** (2025). Signal detection in optical orthogonal time space modulation for efficient VLC application. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0381>

Kumar, A., & **Nanthaamornphong, A.** (2025). Signal detection of massive MIMO-OTFS using DNN algorithm with diverse channel state estimation. *Physics Open*, 25, 100332.

<https://doi.org/10.1016/j.physo.2025.100332>

Nayak, S.K., Garanayak, M., Swain, S.K., Panigrahi, G.R., Sethy, P.K., **Nanthaamornphong, A.** (2025). A decision tree-based approach for disease prediction and Ayurvedic drug recommendation. *Ingénierie des Systèmes d'Information*, Vol. 30, No. 8, pp. 2001-2010.

<https://doi.org/10.18280/isi.300806>

Jat, N., Kumar, A., Ali, E. M., Gupta, M., Elkamchouchi, D. H., & **Nanthaamornphong, A.** (2025). Enhanced isolation unique fractal diminutive MIMO antenna with identical elliptical notch and cross stub for wireless uses. *Scientific Reports*, 15(1), 36600.

<https://doi.org/10.1038/s41598-025-22587-x>

Alam, S., Zardari, S., Munawwar, M., Aamir, T., Gupta, M., & **Nanthaamornphong, A.** (2025). WhiteShield: A white-wash resilient blockchain-based trust management system. *SoftwareX*, 32, Article 102385.

<https://doi.org/10.1016/j.softx.2025.102385>

Dhanke, J., Gurulakshmi, A., Krishnamoorthy, R., Gaur, N., Kumar, A. & **Nanthaamornphong, A.** (2025). VLC application in peak to average power reduction in optical NOMA waveform using PAPR methods. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0293>

Kunwar, F., Maurya, V., Sinha, D., Krishna Edpuganti, S., **Nanthaamornphong, A.** & Kumar, A. (2025). Estimation of spectrum sensing efficiency for optical OFDM for QAM schemes using SVM methods for VLC applications. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0328>

Verma, R., Soni, D., Goyal, A., Gupta, M., Alanazi, F., & **Nanthaamornphong, A.** (2025). A context-aware energy saving information centric (CAES) model for wireless communication network. *Journal of Engineering Research*, 13(3), 2340-2347.

<https://doi.org/10.1016/j.jer.2024.05.030>

Srianan, S., **Nanthaamornphong, A.**, & Phucharoen, C. (2025). Advancing tourism sentiment analysis: A comparative evaluation of traditional machine learning, deep learning, and transformer models on imbalanced datasets. *Information Technology & Tourism*.

🔗 <https://doi.org/10.1007/s40558-025-00336-0>

📅 8/2025 📌 Q 1 (top 10%)

Kumar, A., Gaur, N., Chakravarty, S., & **Nanthaamornphong, A.** (2025). Concurrent wireless power and information transfer with beamforming for 5G networks. *Results in Optics*, 21, 100878.

🔗 <https://doi.org/10.1016/j.rio.2025.100878>

📅 8/2025 📌 Q 2

Gaur, N., Dhanke, J., R, K., Kumar, A. & **Nanthaamornphong, A.** (2025). Adaptive spectrum sensing in optical OFDM using high-order QAM for VLC applications. *Journal of Optical Communications*.

🔗 <https://doi.org/10.1515/joc-2025-0227>

📅 8/2025 📌 Q 1

Kunwar, F., Pareek, R., Raj K, S., **Nanthaamornphong, A.**, Gaur, N. & Sharma, M. (2025). Advanced signal detection in optical OFDM-VLC with 256-QAM scheme: LSTM-aided BER and PSD optimization over Rayleigh channels. *Journal of Optical Communications*.

🔗 <https://doi.org/10.1515/joc-2025-0286>

📅 8/2025 📌 Q 1

Ratha, A. K., Barpanda, N. K., Sethy, P. K., Behera, S. K., & **Nanthaamornphong, A.** (2025). Optimizing papaya disease classification: A hybrid approach using deep features and PCA-enhanced machine learning. *Journal of Intelligent Systems*, 32(1), 1–15.

🔗 <https://doi.org/10.1515/jisys-2024-0523>

📅 8/2025 📌 Q 2

Kumar, A., **Nanthaamornphong, A.**, & Masud, M. (2025). RNN-Bi-LSTM spectrum sensing algorithm for NOMA waveform with diverse channel conditions. *Scientific Reports*, 15(1), 31022.

🔗 <https://doi.org/10.1038/s41598-025-16414-6>

📅 8/2025 📌 Q 1

Kumar, A., & **Nanthaamornphong, A.** (2025). NN-PTS: A neural network-assisted PAPR reduction technique for OTFS with high-order modulation. *High Energy Density Physics*, 56, 101225.

🔗 <https://doi.org/10.1016/j.hedp.2025.101225>

📅 8/2025 📌 Q 3

Kumar, A., **Nanthaamornphong, A.**, & Gaur, N. (2025). Optimizing PAPR performance for 6G OTFS waveform using adaptive genetic PTS method for Rician fading channels. *EURASIP Journal on Advances in Signal Processing*, 2025(1), 22.

🔗 <https://doi.org/10.1186/s13634-025-01234-7>

📅 7/2025 📌 Q 2

Pandey, A., Raja, R., Gupta, M., Alenizi, F. A., Suanpang, P., & Nanthaamornphong, A. (2025). Deep learning enabled garbage classification and detection by visual context for aerial images. *Applied Computational Intelligence and Soft Computing*, 2025(1), 9106130.

🔗 <https://doi.org/10.1155/acs/9106130>

📅 7/2025 📌 Scopus Q1 Top 10%, Applied Computational Intelligence and Soft Computing

Kumar, A., Gaur, N., & **Nanthaamornphong, A.** (2025). Signal detection of massive MIMO systems using LSTM-based signal detectors for beyond 5G radio. *Alexandria Engineering Journal*, 127, 760–770.

🔗 <https://doi.org/10.1016/j.aej.2025.06.041>

📅 7/2025 📌 Alexandria Engineering Journal, Q 1 (top 10%)

Kumar, A., **Nanthaamornphong, A.**, Alsharif, M. H., & Masud, M. (2025). SIC based RL for massive MIMO NOMA signal detection for different modulation schemes under diverse channel conditions. *Scientific Reports*, 15(1), 24641.

🔗 <https://doi.org/10.1038/s41598-025-06492-x>

📅 7/2025 📌 Scientific Reports, Q1

Kumar, A., K T, C., Radhakrishnan, P. & **Nanthaamornphong, A.** (2025). Efficient hybrid signal detection for optical NOMA with 512-QAM in visible light communication. *Journal of Optical Communications*.

🔗 <https://doi.org/10.1515/joc-2025-0136>

7/2025 Q 1

Kumar, A., Chakravarthy, S., Amin, R., & **Nanthaamornphong, A.** (2025). Rate splitting multiple access in V2X. *JET Intelligent Transport Systems*, 19(1), e70067.

<https://doi.org/10.1049/itr2.70067>

7/2025 Q 1 (top 10%)

Patharia, P., Sethy, P. K., Raju, K. L., Khanna, A., Ratha, A. K., Behera, S. K., & **Nanthaamornphong, A.** (2025). Hybrid Darknet53-SVM model with random grid search optimization for enhanced colorectal cancer histological image classification. *Discover Artificial Intelligence*, 5(1), 181.

<https://doi.org/10.1007/s44163-025-00404-8>

7/2025 Q 1

Sharma, S., Shrivastav, A., Shinde, J., Jirapure, A. B., Gawai, J. S., & **Nanthaamornphong, A.** (2025). Optimizing YOLOv5-powered real-time surveillance using optical communication networks. *Journal of Optical Communications*.

<https://doi.org/10.1515/joc-2025-0264>

7/2025 Journal of Optical Communications, Q 1

Kumar, A., Chakravarthy, S., & **Nanthaamornphong, A.** (2025). Investigation of the satellite internet of things and reinforcement learning via complex software defined network modeling. *International Journal of Electrical and Computer Engineering (IJECE)*, 15(3), 3506.

<http://doi.org/10.11591/ijece.v15i3.pp3506-3518>

6/2025 Q2

Ratha, A. K., Devi, A. G., Sethy, P. K., Barpanda, N. K., Behera, S. K., & **Nanthaamornphong, A.** (2025). Deep learning-powered precision: A CNN-based approach for postharvest classification of Indian banana varieties in supermarket supply chains. *Food Science and Technology*, 13(2), 165–177.

<https://doi.org/10.13189/fst.2025.130205>

6/2025 Food Science and Technology

Mishra, K., Behera, S. K., Devi, A. G., Sethy, P. K., & **Nanthaamornphong, A.** (2025). Integrating shallow and deep features for precision evaluation of corn grain quality: A novel fusion approach. *International Journal of Computational Intelligence Systems*, 18(1), 156.

<https://doi.org/10.1007/s44196-025-00889-2>

6/2025 Q1, International Journal of Computational Intelligence Systems

Kumar, A., Gaur, N., & **Nanthaamornphong, A.** (2025). Optical OTFS waveform PAPR analysis for high order modulation employing CNN, DNN, and AE machine learning algorithms under a variety of channel scenarios. *Physics Open*, 24, 100284.

<https://doi.org/10.1016/j.physo.2025.100284>

6/2025 Q3, Physics Open

Ramudu, K., Udayakumar, A. K., Kumar, A., **Nanthaamornphong, A.**, & Gopinath, S. (2025). Optimized neuro-adaptive twin pulse-coupled estimators for efficient channel estimation in heterogeneous 5G MIMO-OFDM communication systems. *Internet Technology Letters*, 8(3), e70013.

<https://doi.org/10.1002/itl2.70013>

5/2025 Internet Technology Letters, Q3

Pal, K., Kumari, N., Akella, A. K., Gupta, M., Suanpang, P., & **Nanthaamornphong, A.** (2025). Machine learning-based image pattern recognition using histogram of oriented gradient for islanding detection. *IEEE Access*, 13, 74396–74416.

<https://doi.org/10.1109/ACCESS.2025.3564145>

5/2025 IEEE Access, Q1 (Tier 1)

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Aziz Nanthaamornphong (PI) and Rattana Wetprasit (Co-PI), *Effectiveness of Agile in Thailand* funded by Faculty of Technology and Environment, 2014 - 2015

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AWARDS

- **Staff of the Year Award 2020**, *College of Computing, Prince of Songkla University, Phuket Campus*
- **Outstanding Researcher Award**, *PRIDE of PSU 2020*
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- **Outstanding Researcher Award**, *PRIDE of PSU 2019*
- **Best Paper Award**, *The 23rd International Computer Science and Engineering Conference (ICSEC 2019)*
- **RGJ-PhD Scholarship** for Advisor 2018

- Outstanding Researcher Award, *PRIDE of PSU 2018*
- Best Paper Award, *The 10th Malaysian Software Engineering Conference (MySEC 2017)*
- Outstanding Paper Award, *The 10th Malaysian Software Engineering Conference (MySEC 2017)*
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- Travel Stipend, *The 2017 International Workshop on Software Engineering for Science*
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- Teacher nominated by Students as **Beloved, and Faithful**, *PRIDE of PSU 2017*
- Travel Stipend, *The 4th International Workshop on Software Engineering for High-Performance Computing in Computational Science and Engineering, 2016*
- Best Session Speaker, *The 8th International Conference on Advanced Computer Science and Information Systems, 2016*
- Best Paper Award, *The 8th Malaysian Software Engineering (MySEC 2014)*
- Royal Thai Government Scholarship (Ph.D.program), 2008 - 2014
- Outstanding Undergraduate Student, *Faculty of Engineering, Thammasat University, 1997*

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