PERSONAL DATA

Name : ASSOCIATE PROFESSOR AZIZ NANTHAAMORNPHONG
Position : Dean of College of Computing
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PUBLICATIONS SUMMARY

190	33	6	3	5
International Journal	International. Proceedings	National. Proceedings	Chapters	Research Grants

Total Publications: 237

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 Nanthaamornohong, 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** C(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 Luenglertpaiboon (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 Internation 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

Nanthaamornphong, A., Kumar, A., Revathi, V., Gaur, N., & Saini, A. K. (2026). RNN based MMSE detection for massive MIMO systems with OTA and imperfect channel state information. Discover Applied Sciences, 8, Article 1131. *https://doi.org/10.1007/s42452-026-09176-x*

10/2026

Githala, K., Masud, M., Kumar, A., **Nanthaamornphong, A.**, & Gupta, M. (2026). High-isolation super-wideband MIMO antenna based on elliptical-ring geometry for next-generation wireless applications. Discover Applied Sciences, 8, Article 1156. *https://doi.org/10.1007/s42452-026-09254-0*

10/2026

Kumar, A., Gaur, N., Masud, M., Meshref, H., & **Nanthaamornphong, A.** (2026). Robust transformer neural network based signal detector for optical-OTFS in doubly dispersive channels with BER and PSD evaluation. Array, 32, Article 101308. *https://doi.org/10.1016/j.array.2026.101308*

10/2026

Kumar, A., Revathi, V., Masud, M., Alohali, M., Gaur, N., & **Nanthaamornphong, A.** (2026). Coherence-time-compliant amortized PTS for OTSM in 6G V2X. IEEE Internet of Things Journal, 13(19), 45231–45246. *https://doi.org/10.1109/JIOT.2026.3718730*

10/2026

Nanthaamornphong, A., Kumar, A., Revathi, V. et al. Hybrid invasive weed optimization assisted PTS–SLM framework for efficient PAPR reduction in NOMA systems over Rayleigh and Rician channels. Discov Appl Sci 8, 997 (2026). *https://doi.org/10.1007/s42452-026-08962-x*

9/2026

Kumar, A., Revathi, V., Gaur, N., Pradhan, P. C., & **Nanthaamornphong, A.** (2026). Reliable deep learning–assisted spectrum sensing for cognitive radio and 6G wireless networks. Journal of Electrical and Computer Engineering, 2026(1), Article 2164804. *9/2026* *https://doi.org/10.1155/jece/2164804*

Baisakh, Devi, A. G., Sethy, P. K., Behera, S. K., & **Nanthaamornphong, A.** (2026). Hybrid lightweight deep learning architecture for small-scale millet classification. Journal of Intelligent Decision Making and Information Science, 3(9s), 1267–1288. *https://jidmis.org/index.php/jidmis/article/view/2485*

9/2026

Kumar, A., Masud, M., Gaur, N., & **Nanthaamornphong, A.** (2026). Hybrid GRU–LSTM–CNN deep learning model for cooperative spectrum sensing in cognitive radio networks. Results in Control and Optimization, 25, Article 100823. h *ttps://doi.org/10.1016/j.rico.2026.100823*

9/2026

Kumar, A., Wongsirichot, T., & **Nanthaamornphong, A.** (2026). Generative AI in computing education: A systematic review and a framework for responsible integration. Computers and Education: Artificial Intelligence, 11, Article 100677 *https://doi.org/10.1016/j.caeai.2026.100677*

9/2026

Kumar, A., Revathi, V., Alsharif, M. H., Gaur, N., & **Nanthaamornphong, A.** (2026). Learning-based Bayesian deep unfolding for robust MIMO detection under imperfect CSI. IEEE Signal Processing Letters, 33, 3651–3655. *9/2026* *https://doi.org/10.1109/LSP.2026.3719183*

Panthi, V., Kashyap, N., Gupta, M., Alenizi, F. A., Suanpang, P., & **Nanthaamornphong, A.** (2026). A two-hidden-layer Levenberg–Marquardt neural network for supervised trajectory approximation of a nonlinear anthrax in animals epidemic model. Discover Artificial Intelligence, 6(1), Article 1234. *https://doi.org/10.1007/s44163-026-02326-5*

9/2026

Kumar, A., Revathi, V., Gaur, N., & Nanthaamornphong, A. (2026). Comprehensive analysis of 6G optical NOMA waveforms using neural network-based detection for high-order QAM modulation. Results in Optics, 25, Article 101159. *https://doi.org/10.1016/j.rio.2026.101159*

9/2026

Dhanke, J. A., Kumar, C. M. S., Siva Raja, P. M., Maguluri, L. P., Patan, M. K., Pradhan, P. C., & **Nanthaamornphong, A.** (2026). Multi-objective convex-optimization model for peak-power regularization in superposition-coded multicarrier systems with fifth generation constraints. Engineered Science, 43, Article 2492. *https://doi.org/10.30919/es2492*

9/2026

Reddy, N. V. U., Raja, P. M. S., Kolikipogu, R., Gopinath, D., Kumar, A., & **Nanthaamornphong, A.** (2026). Secure machine-learning-driven spectrum sensing and allocation for fifth generation cognitive radio networks using lightweight cryptography. Engineered Science, 42, Article 2423. *https://doi.org/10.30919/es2423*

8/2026

Kumar, A., Revathi, V., Baruah, J. K., Pradhan, P. C., & **Nanthaamornphong, A.** (2026). A Module-LWE driven post-quantum security model for 6G networks using discrete mathematical cryptography. Journal of Discrete Mathematical Sciences & Cryptography, 29(8), 3065–3073. *https://doi.org/10.47974/JDMSC-2691*

8/2026

Kumar, A., Syed Ahmad, S. S., Alohali, M., Masud, M., & **Nanthaamornphong, A.** (2026). Nonlinear PAPR suppression in OTSM systems using a reduced candidate strategy for energy-efficient 6G networks. ICT Express. Advance online publication. *https://doi.org/10.1016/j.icte.2026.07.006*

8/2026

Kumari, B., Soni, S., Gupta, M., Suanpang, P., & **Nanthaamornphong, A.** (2026). ECO-MOVE: Energy and cost optimization in mobility-aware virtual environment for sustainable wireless sensor networks. Journal of Sensors, 2026(1), Article 7623369. *https://doi.org/10.1155/js/7623369*

8/2026 *https://doi.org/10.1155/js/7623369*

Nanthaamornphong, A., Kumar, A., V. R., & Gaur, N. (2026). Data privacy and security in the future data-driven healthcare ecosystem : Cryptographic approaches, challenges, and open research issues. Journal of Discrete Mathematical Sciences and Cryptography, 29(8), 3127–3136. *https://doi.org/10.47974/JDMSC-2697*

8/2026

Abbasov, Z. D., Youssri, Y. H., Gupta, M., Suanpang, P., & **Nanthaamornphong, A.** (2026). The Cauchy–Dirichlet problem for [n]-dimensional hyperbolic equations with a [p]-th degree trigonometric source. International Journal of Analysis and Applications, 24, Article 261. *https://doi.org/10.28924/2291-8639-24-2026-261*

8/2026

B, M., Devanna, H., Kumar, C., Giridhar, M., Gautam, R. & **Nanthaamornphong, A.** (2026). Intelligent algorithms for enhancing power amplifier performance in optical OFDM systems for VLC applications. *Journal of Optical Communications.* *https://doi.org/10.1515/joc-2026-0241*

7/2026

Kumar, A., Revathi, V., Gaur, N., Gautam, R. K. S., & **Nanthaamornphong, A.** (2026). A hybrid two-parameter over-relaxation and orthogonal approximate message passing detection scheme with adaptive parameter optimization for massive multiple-input multiple-output systems. Engineered Science, 42, 2364. *https://doi.org/10.30919/es2364*

7/2026

Kumar, A., Alohali, M., Revathi, V., Masud, M., Gaur, N., & **Nanthaamornphong, A.** (2026). A residual-learning MMSE neural detector for 6G MIMO-OTFS systems under diverse channel conditions. Scientific Reports, 16(1), 23042. *https://doi.org/10.1038/s41598-026-52952-3*

7/2026

Kumar, A., Revathi, V., Gaur, N., & **Nanthaamornphong, A.** (2026). An autoencoder-aided multi-objective optimization framework for energy-latency-reliability trade-offs in 6G networks. Engineering, Technology & Applied Science Research, 16(5), 38730–38737. *https://doi.org/10.48084/etasr.19931*

7/2026

Uma Reddy, N., Radhakrishnan, P., Piruthiviraj, P., Gaur, N., Chandra Pradhan, P. & **Nanthaamornphong, A.** (2026). Reinforcement learning-based power amplifier aware Peak-to-Average power ratio reduction in optical OTSM systems. Journal of Optical Communications. *https://doi.org/10.1515/joc-2026-0288*

7/2026

Kumar, A., Revathi, V., Gaur, N., & **Nanthaamornphong, A.** (2026). Learning-assisted probabilistic precoding for PAPR reduction in OTSM with different subcarrier configurations. IEEE Communications Letters, 30, 2058–2062. *https://doi.org/10.1109/LCOMM.2026.3695746*

6/2026

Kumar, A., Syed Ahmad, S. S., Revathi, V., Masud, M., & **Nanthaamornphong, A**. (2026). Performance-optimized deep Q-learning spectrum sensing for OTFS-based vehicular networks beyond 5G. Results in Engineering, 31, 111336. *https://doi.org/10.1016/j.rineng.2026.111336*

6/2026

Fareed, A. F., Manjunatha, B., Gautam, R. K. S., Mohamed, E. A., Malik, I., & **Nanthaamornphong, A.** (2026). A novel conformable fractional-order control scheme with fractional noise compensation for enhanced stability in smart power grids. Engineered Science, 41, 2333. *https://doi.org/10.30919/es2333*

6/2026

Kumar, A., Revathi, V., Gaur, N., Masud, M., & **Nanthaamornphong, A.** (2026). PAPR reduction using deep reinforcement learning based tone reservation for 5G OTSM waveform. Wireless Personal Communications. Advance online publication. *https://doi.org/10.1007/s11277-026-12146-6*

6/2026

Kumar, A., Masud, M., Alohali, M., Pradhan, P. C., & **Nanthaamornphong, A.** (2026). Graph-guided adaptive companding for PAPR reduction in power-domain NOMA systems. PLOS ONE, 21(5), 1–36. *ttps://doi.org/10.1371/journal.pone.0349671*

5/2026 PLOS ONE

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

Revathi, V., Patil, R., Dhanke, J., Kumar, A. & **Nanthaamornphong, A.** (2026). Channel-uncertainty-aware hybrid learning spectrum sensing for optical OFDM networks with imperfect channel estimation. Journal of Optical Communications. https://doi.org/10.1515/joc-2026-0006 *https://doi.org/10.1515/joc-2026-0006*

4/2026

A. B, K., Revathi, V., Kumar, A., Raja, P. & **Nanthaamornphong, A.** (2026). Reducing PAPR in optical NOMA-based visible light communication systems for beyond 5G applications. Journal of Optical Communications.

https://doi.org/10.1515/joc-2026-0100

4/2026

Kumar, A., Ahmad, S. S. S., Revathi, V., Masud, M., Gaur, N., & **Nanthaamornphong, A.** (2026). Optical OTSM signal detection using RNN-based QRM-MLD for optical Rayleigh channels. Journal on Advances in Signal Processing, 2026(1), 47. *https://doi.org/10.1186/s13634-026-01327-x*

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

2/2026

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://xlescience.org/index.php/IJASIS/article/view/919

2/2026

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

2/2026 *pen Life Sciences,*

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

1/2026

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

1/2026

Raj K, S., Parepalli, R., Kumar, A., Bobade, S. D., & **Nanthaamorphong, 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

1/2026

Revathi, V., Tagare, T. S., Chakravarty, S., Baruah, J. K., Kumar, A., & **Nanthaamorphong, 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

1/2026

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

1/2026 Journal of Optical Communications

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

1/2026 EURASIP Journal on Wireless Communications and Networking

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

12/2025

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

12/2025

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

Patharia, P., Rao, B. S. P., Sethy, P. K., Ratha, A. K., & **Nanthaamornphong, A.** (2025). Enhanced diagnosis of lung and colon cancer severity through deep feature analysis using DenseNet201 and SVM with histopathological images: A super-resolution approach. Cancer Reports, 8, Article e70439. https://doi.org/10.1002/cnr2.70439

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*.

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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 *Reults 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 UFMC 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.

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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

10/2025 *Journal of Optical Communications*

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*.

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RESEARCH GRANTS

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funded by Factulty of Technology and Environment, 2014 - 2015

2014

AWARDS

- **Staff of the Year Award 2020**, *College of Computing, Prince of Songkla University, Phuket Campus*
- **Outstanding Researcher Award**, *PRIDE of PSU 2020*
- **Best Paper Award**, *The 17th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2020)*
- **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)*
- **Best Paper Award**, *The 13th National Conference on Computing and Information Technology (NCCIT 2017)*
- **Travel Stipend**, *The 2017 International Workshop on Software Engineering for Science*
- **Travel Stipend**, *The National University of Singapore (NUS) SoC Research Workshop 2017*
- **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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