

PERSONAL DATA



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PUBLICATIONS SUMMARY

14

International Journal

1

National Journal

10

International. Proceedings

2

National. Proceedings

1

Books

Total Publications: 28

EDUCATION

Ph.D. Degree	2010	Ph.D. (Algorithms and Theory) Griffith University, Australia
Bachelor Degree	2001	B.Eng. (First Class Honours) Griffith University, Australia

RESEARCH INTERESTS

Algorithms for Time Series Data Analysis



Image Processing



Mathematical Modelling



APPOINTMENT

2019 - 2020: Assistant President for Academic Affairs, PSU Phuket
 2019 - 2019: Assistant President for Academic Affairs and International Affairs, PSU Phuket

2017 - 2018: Assistant President for Global Relations, PSU Phuket
2017 - 2018: Chairman of the PSU Phuket International Campus Committee
2015 - 2016: Deputy Head of Computer Engineering Department (Planning & Development)
2011 - 2012: Deputy Head of Computer Engineering Department (Administration)
2010 - 2011: Asst. Head of Computer Engineering Department (Planning & Development)

TEACHING

- Mathematics for Intelligent Objects
- Introductory Spatial Statistics
- Introduction to Algorithms & Complexity
- Discrete Mathematics
- Mathematics for Computer Engineering
- Information Systems and Management
- Information Searching and Presentations
- Ethical, Legal and Social Issues in Computer Profession
- Introduction to Engineering
- Computer Engineering Project Preparation
- Computer Engineering Project I
- Computer Engineering Project II
- Thesis (Master)
- Thesis (PhD)

MSc/PhD STUDENTS

- **PhD Thesis:** “Improved Kriging Algorithms for Spatial Data Interpolation” by Arsanchai Sukkuea (graduated 2022)
- **PhD Thesis:** “Half-FFT Features and Hierarchy Algorithms for Cloud Type Classification Using Ground-Based Images” by Thitinan Kliangsuwan (graduated 2016)
- **Master Thesis:** “Adaptation of Evolutionary Algorithms in RBF Neural Network for Flood Forecasting” by Kullawat Chaowanawatee (graduated 2012)

INTERNATIONAL JOURNAL ARTICLES

Apichat Heednacram, Thitinan Kliangsuwan, Warodom Werapun, “Implementation of Four Machine Learning Algorithms for Forecasting Stock’s Low and High Prices”, *Neural Computing and Applications*, vol. 36, issue 31, pp. 19323-19336, November, 2024. <https://doi.org/10.1007/s00521-024-10247-6> (ISSN 0941-0643, E-ISSN 1433-3058, Scopus-Q1, ISI-Q2, SCIE, Impact Factor 2023: 4.5)

📅 11/2024

Apichat Heednacram, Yossawee Keaomane, “Four Enhanced Algorithms for Full Size Image Hiding in Chest X-ray Images”, *Multimedia Tools and Applications*, vol. 83, issue 30, pp. 74855-74881, September, 2024. <https://doi.org/10.1007/s11042-024-18226-8> (ISSN 1380-7501, E-ISSN 1573-7721, Scopus-Q1, ISI-Q2, SCIE, Impact Factor 2022: 3.6)

📅 9/2024

Yossawee Keaomane, Apichat Heednacram, “Effects of Discrete Cosine Transform Arrangement Patterns on Full Size Image Steganography”, *Songklanakarin Journal of Science and Technology (SJST)*, vol. 46, no. 2, pp. 159-168, March - April, 2024. <https://sjst.psu.ac.th/issue.php?id=142> (ISSN 0125-3395, E-ISSN 2408-1779, Scopus-Q3, SJR 2022: 0.16)

🔗 <https://sjst.psu.ac.th/issue.php?id=142>

📅 3/2024

Arsanchai Sukkuea, Apichat Heednacram, "Prediction on Spatial Elevation Using Improved Kriging Algorithms: An application in Environmental Management", *Expert Systems with Applications*, vol. 207, no. 117971, pp. 1-10, November, 2022. (ISSN 0957-4174, <https://doi.org/10.1016/j.eswa.2022.117971>, ISI-Q1, SCIE, Impact Factor 2021: 8.665)

11/2022

Arsanchai Sukkuea, Apichat Heednacram, "Practical Kriging Models with Divide and Conquer Algorithms for Spatial Heights Forecast", *Ecological Informatics*, vol. 70, no. 101756, pp. 1-11, September, 2022. (ISSN 1574-9541, <https://doi.org/10.1016/j.ecoinf.2022.101756>, ISI-Q1, SCIE, Impact Factor 2021: 4.498)

9/2022

Yossawee Keaomane, Apichat Heednacram, Prakarnkiat Youngkong, "Implementation of Four Kriging Models for Depth Inpainting", *ICT Express*, vol. 6, issue 3, pp. 209-213, September, 2020. (ISSN 2405-9595, <https://doi.org/10.1016/j.icte.2020.05.004>, ISI-Q2, SCIE, Impact Factor 2021: 4.754)

9/2020

Thitinan Kliangsuwan, Apichat Heednacram, "FFT Features and Hierarchical Classification Algorithms for Cloud Images", *Engineering Applications of Artificial Intelligence*, vol. 76, pp. 40-54, November, 2018. (ISSN 0952-1976, <https://doi.org/10.1016/j.engappai.2018.08.008>, ISI-Q1, SCIE, 5-Year Impact Factor: 3.130)

11/2018

Thitinan Kliangsuwan, Apichat Heednacram, "Feature Extraction Techniques for Ground-based Cloud Type Classification", *Expert Systems with Applications*, vol. 42, issue 21, pp. 8294-8303, November 30, 2015. (ISSN 0957-4174, <http://dx.doi.org/10.1016/j.eswa.2015.05.016>, ISI-Q1, SCIE, 5-Year Impact Factor: 2.571)

11/2015

Apichat Heednacram, and Thammaratt Samitalampa, "Suspended Sediment Forecast of Khlong Bang Yai, Phuket", *IACSIT International Journal of Engineering and Technology (IJET)*, vol. 6, no. 4, pp. 338-345, 2014. (ISSN: 1793-8236, INSPEC Indexing)

8/2014

Thitinan Kliangsuwan, Apichat Heednacram, "Classifiers for Ground-Based Cloud Images Using Texture Features", *Advanced Materials Research (AMR)*, vol. 931-932, pp. 1392-1396, 2014. (ISBN: 978-3-03835-090-3, SCOPUS Indexing)

5/2014

Apichat Heednacram, Warodom 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, SCOPUS Indexing)

5/2014

V. Estivill-Castro, A. Heednacram, and F. Suraweera. FPT-algorithms for Minimum-Bends Tours. *International Journal of Computational Geometry and Applications*, 21(2): 189-213, April 2011. (ISSN: 0218-1959, 2008 Impact Factor = 0.436, ISI Indexing)

4/2011

V. Estivill-Castro, A. Heednacram, and F. Suraweera. NP-completeness and FPT Results for Rectilinear Covering Problems. *Journal of Universal Computer Science*, 16(5):622-652, May 2010. (ISSN : 0948-695X, 2010 Impact Factor = 0.788, ISI Indexing)

5/2010

V. Estivill-Castro, A. Heednacram, and F. Suraweera. Reduction Rules Deliver Efficient FPT-Algorithms for Covering Points with Lines. *ACM Journal of Experimental Algorithmics*, 14:1.7-1.26, November 2009. (ISSN: 1084-6654)

11/2009

INTERNATIONAL PROCEEDINGS

Apichat Heednacram, Yossawee Kaeomane, Jarupong Plodtong, "Estimation of Major Seismic Activities in Thailand using Fourier Transform", *Proceedings of the 21st International Joint Conference on Computer Science and Software Engineering (JCSSE2024)*, no. 1571013496, pages 351-357, Phuket, Thailand, June 19 – 22, 2024. (IEEE Xplore Digital Library, <https://doi.org/10.1109/JCSSE61278.2024.10613694>, SCOPUS Indexing)

6/2024

Apichat Heednacram, Phatcharee Thepmit, "Thai Covid-19 Wave Breaks Analysis Based on Fourier Transform", *Proceedings of the 26th International Computer Science and Engineering Conference 2022 (ICSEC2022)*, no. 1570855242, pages 213-218, Sakon Nakhon, Thailand, December 21 – 23, 2022. (IEEE Xplore Digital Library, <https://doi.org/10.1109/ICSEC56337.2022.10049349>, SCOPUS Indexing)

12/2022

Thitinan Kliangsuwan, Apichat Heednacram, Kittasil Silanon, "Face Recognition Algorithms for Online and On-Site Classes", *Proceedings of the 19th International Joint Conference on Computer Science and Software Engineering (JCSSE2022)*, no. 1570800337, pages 1-6, Bangkok, Thailand, June 22 – 25, 2022. (IEEE Xplore Digital Library, <https://doi.org/10.1109/JCSSE54890.2022.9836309>, SCOPUS Indexing)

6/2022

Thitinan Kliangsuwan, Apichat Heednacram, "A Low-Cost Local Cloud Monitoring System", *Proceedings of the 2016 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2016)*, pages 418-423, Phuket, Thailand, October 24 – 27, 2016. (ISBN: 978-1-5090-0628-1, IEEE Xplore Digital Library, IEEE Catalog Number: CFP16580-USB, SCOPUS Indexing)

10/2016

Warodom 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

Kullawat Chaowanawatee, Apichat Heednacram, "Improved Cuckoo Search in RBF Neural Network with Gaussian Distribution", *Proceedings of the 8th IASTED International Conference on Advances in Computer Science (ACS2013)*, pages 379-386, Phuket, Thailand, April 10 – 12, 2013. (SCOPUS indexing)

4/2013

Apichat Heednacram, Noppon Lertchuwongsa, "Information Technology for Reducing Earthquake Impacts on Phuket Tourism", *Proceedings of the 1st Annual PSU Phuket International Conference 2012*, Prince of Songkla University, Phuket, Thailand, January 10 – 12, 2013.

1/2013

Siraporn Sornsakda, Apichat Heednacram, "Simulation of Flow Acceleration by Water Jets for Flood Relief", *Proceedings of the 1st Annual PSU Phuket International Conference 2012*, Prince of Songkla University, Phuket, Thailand, January 10 – 12, 2013.

1/2013

Kullawat Chaowanawatee, Apichat Heednacram, "Implementation of Cuckoo Search in RBF Neural Network for Flood Forecasting", *Proceedings of the 4th International Conference on Computational Intelligence, Communication Systems and Networks (CICSYN2012)*, IEEE (978-0-7695-4821-0), pages 22-26, IEEE Computer Society, Los Alamitos, July 24 – 26, 2012. (SCOPUS indexing)

7/2012

V. Estivill-Castro, A. Heednacram, and F. Suraweera. "The Rectilinear k-Bends TSP", In, M. T. Thai and S. Sahni, editors, *Proceedings of the 16th Annual International Combinatorics Conference (COCOON)*, volume 6196

NATIONAL PROCEEDINGS

Nutthawong Numseinapol, Apichat Heednacram, “Real-Time Solar Cell Monitoring on Android (RSCMA)”, *Proceedings of the 7th ECTI-Card 2015*, pages 447-450, Trang, Thailand, July 8 – 10, 2015.

Jaturong Sitidumrong, Apichat Heednacram, “Rescue Management System on Android”, *Proceedings of the 7th ECTI-Card 2015*, pages 443-446, Trang, Thailand, July 8 – 10, 2015.

BOOKS

Text Book: Apichat Heednacram, PhD, Discrete Mathematics, 2016, 212 pages, ISBN : 978-616-271-321-7

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