

## 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

Apichat Heednacram, Teaching Honesty in the Buddhist Way, *Journal of Moral and Virtue*, 1(1):94-106, September 2012.

📅 9/2012

## INTERNATIONAL PROCEEDINGS

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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

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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

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

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### COLLEGE OF COMPUTING

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