

# Wudhichart Sawangphol

## Address

Faculty of ICT  
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## Research Interests

Automated Reasoning, Description Logic, Ontology, Constraint Programming, Machine Learning, Data analysis, and Data Visualisation.

## Professional Experience

Lecturer, Faculty of Information and Communication Technology (ICT), Mahidol University, Nakhon Pathom, Thailand, since 2009

Assistant Dean, Faculty of Information and Communication Technology (ICT), Mahidol University, Nakhon Pathom, Thailand, since Dec 2019

Teaching Associate, Faculty of Information Technology, Monash University, Melbourne, Australia, 2012-2017

## Education

Doctor of Philosophy in Information Technology  
Faculty of Information Technology, Monash University, Clayton Campus, Australia, 2017

Master of Information Technology (Minor Thesis)  
Faculty of Information Technology, Monash University, Caulfield Campus, Australia, 2012

Bachelor of Science in Information and Communication Technology, First Class Honours  
Faculty of Science, Mahidol University, Salaya Campus, Thailand, 2008

## Selected Honors

### Best Paper Awards

Mitpanont, J., **Sawangphol, W.**, Chankong, C., Jitsuphap, A., & Wongkhumsin, N. (2018). I WISH: Integrated Well-Being IoT System for Healthiness. Paper presented at the 15th International Joint Conference on Computer Science and Software Engineering (JCSSE2018)., Nakhon Pathom, Thailand.

Mitpanont, J., Roungsuriyaviboon, J., Sathapornwatanakul, T., **Sawangphol, W.**, Kobayashi, D., & Haga, J. H. (2017). Extending MedThaiVis-Thai Medical Research Visualization to SAGE2 Display Walls. Paper presented at the 2nd International Conference on Information Technology (InCIT2017)., Nakhon Pathom, Thailand.

## Selected Professional Service

### Program Committee

The International Joint Conference on Computer Science and Software Engineering (JCSSE), 2018, 2019, 2020

The ICT International Student Project Conference (ICT-ISPC), 2018

The IEEE International Conference on Ubi-Media Computing, 2018

The International Conference on Information Technology (InCIT), 2017, 2019, 2020

### Selected Research Grants

NRCT, “Policy communication and the development of public relations and information systems”, Oct 2019 – Sept 2020, 2,600,000 Baht

TSRI, “An Adaptation Strategy towards Reservoir Re-Operation for Long-Term Water Supply Management of Bhumibol Dam (Phase 1)”, Aug 2019 – Jul 2020, 4,082,840 Baht

### Doctoral Student Supervision

Name	Year Graduated, University
Kanrawi Kitkhachonkunlaphat	Current Student, Mahidol University
KHIN MUYAR KYAW	Current Student, Mahidol University

### Publication Statistics

Journal Articles: 1

Conference Papers: 15

Workshop Papers: 1

Citations: Google Scholar: 43 with h-index of 3

Scopus: 25 (excluding self-citations) with h-index of 3

### Selected Publications

1. Kraisangka, J., **Sawangphol, W.**, Rojcharoenpreeda, P., Tangchadakorn, C., Vechjatuporn, M., Limpasitiponm, C., Itthisaeng, P., & Boonwan, S. (2020). Getting to know one’s role in team through personality-based clustering. *2020 17th International Joint Conference on Computer Science and Software Engineering (JCSSE)*, 80–85.
2. KYAW, K. M., RITTIMA, A., PHANKAMOLSIL, Y., TABUCANON, A. S., **SAWANGPHOL, W.**, KRAISANGKA, J., TALALUXMANA, Y., & VUDHIVANICH, V. (2020). TRACING CROP WATER DEMAND IN THE LOWER PING RIVER BASIN, THAILAND USING CLOUD--BASED IRRISAT APPLICATION. *The 22nd Congress of International Association for Hydro Environment Engineering and Research(IAHR) and Asia Pacific Division(APD)*.
3. Koontanakulvong, S., Vudhivanich, V., Rittima, A., Phankamolsil, Y., Tabucanon, A. S., **Sawangphol, W.**, Kraisangka, J., & Talaluxmana, Y. (2020). Lesson Learnt from Past to Present and Water Storage Potential in Future for Bhumibol and Sirikit Dams. *2020 13th THAICID National E-Symposium*.
4. Koontanakulvong, S., Vudhivanich, V., Rittima, A., Phankamolsil, Y., Tabucanon, A. S., **Sawangphol, W.**, Kraisangka, J., & Talaluxmana, Y. (2020). The Challenges of Drought 2020 : Current Situation of Water Supply and Water Demand–Reservoir Planning and Operation in the Greater Chao Phraya River Basin. *2020 13th THAICID National E-Symposium*.
5. Puakalong, C., Takano, R., Visoottiviseth, V., Khurat, A., & **Sawangphol, W.** (2020, April). A Network Bandwidth Limitation with the DEMU Network Emulator. In *2020 IEEE 10th Symposium on Computer Applications & Industrial Electronics (ISCAIE)* (pp. 151-154). IEEE.
6. Pojsomphong, N., Visoottiviseth, V., **Sawangphol, W.**, Khurat, A., Kashihara, S., & Fall, D. (2020, April). Investigation of Drone Vulnerability and its Countermeasure. In *2020*

*IEEE 10th Symposium on Computer Applications & Industrial Electronics (ISCAIE)* (pp. 251-255). IEEE.

7. Reantongcome, V., Visoottiviseth, V., **Sawangphol, W.**, Khurat, A., Kashihara, S., & Fall, D. (2020, April). Securing and Trustworthy Blockchain-based Multi-Tenant Cloud Computing. In *2020 IEEE 10th Symposium on Computer Applications & Industrial Electronics (ISCAIE)* (pp. 256-261). IEEE.
8. Kang, Y. B., Krishnaswamy, S., **Sawangphol, W.**, Gao, L., & Li, Y. F. (2020). Understanding and improving ontology reasoning efficiency through learning and ranking. *Information Systems*.
9. Khurat, A., & **Sawangphol, W.** (2019, July). An Ontology for SNORT Rule. In *2019 16th International Joint Conference on Computer Science and Software Engineering (JCSSE)* (pp. 49-55). IEEE.
10. Taveekarn, W., Yimudom, C., Sukkanta, S., Lynden, S., **Sawangphol, W.**, & Tuarob, S. (2019, July). DATA++: An Automated Tool for Intelligent Data Augmentation Using Wikidata. In *2019 16th International Joint Conference on Computer Science and Software Engineering (JCSSE)* (pp. 91-96). IEEE.
11. Mitranont, J., **Sawangphol, W.**, Roungsuriyaviboon, J., Sathapornwatanakul, T., Pillavas, T., Sangaroonsilp, P., & Haga, J. (2018, July). MedThaiSAGE: Decision Support System to Suggest Healthcare Policies using Rule Findings Technique. In *2018 15th International Joint Conference on Computer Science and Software Engineering (JCSSE)* (pp. 1-6). IEEE
12. Mitranont, J., **Sawangphol, W.**, Chankong, C., Jitsuphap, A., & Wongkhumsin, N. (2018, July). I-WISH: Integrated Well-Being IoT System for Healthiness. In *2018 15th International Joint Conference on Computer Science and Software Engineering (JCSSE)* (pp. 1-6). IEEE.
13. Mitranont, J., **Sawangphol, W.**, Vithantirawat, T., Paengkaew, S., & Suwannasing, P. (2018, July). K4ThaiHealth: A Prototype for Thai Routine Medical Research Knowledge Extraction Sharing. In *2018 Seventh ICT International Student Project Conference (ICT-ISPC)* (pp. 1-6). IEEE.
14. Mitranont, J., Roungsuriyaviboon, J., Sathapornwatanakul, T., **Sawangphol, W.**, Kobayashi, D., & Haga, J. H. (2017, November). Extending MedThaiVis-Thai medical research visualization to SAGE2 display walls. In *2017 2nd International Conference on Information Technology (INCIT)* (pp. 1-6). IEEE.
15. Mitranont, J., **Sawangphol, W.**, Vithantirawat, T., Paengkaew, S., Suwannasing, P., Daramas, A., & Chen, Y. C. (2017, November). A study on using Python vs Weka on dialysis data analysis. In *2017 2nd International Conference on Information Technology (INCIT)* (pp. 1-6). IEEE.
16. **Sawangphol, W.**, Li, Y.-F., and Tack, G. (2016), CP4DL: Constraint-based Reasoning for Expressive Description Logics. In *The fifteenth International Workshop on Constraint Modelling and Reformulation (ModRef 2016)*., Toulouse, France.
17. Kang, Y. B., Pan, J. Z., Krishnaswamy, S., **Sawangphol, W.**, & Li, Y. F. (2014, June). How long will it take? accurate prediction of ontology reasoning performance. In *Twenty-Eighth AAAI Conference on Artificial Intelligence*.