

# WORAWIT TEPSAN, Ph.D.

Work: Lecturer, International College of Digital Innovation (ICDI)  
Chiang Mai University, Chiang Mai, Thailand

Research Interests: Data Analysis, Machine Learning, Artificial Intelligence,  
Digital Technology, Applied Mathematics

Email: worawit.tepsan@cmu.ac.th Tel: +66843644500

Webpage: <https://wtepsan.github.io>



## PUBLICATIONS

- Tepsan, W., Sooksatra, S., Lueangwitchajaroen, P., & Watcharapinchai, S. (2024). Adaptive body part ROI with triple stream approach for human action recognition. In Proceedings of the 2024 21st International Joint Conference on Computer Science and Software Engineering (JCSSE) (pp. 79-85). <https://doi.org/10.1109/JCSSE61278.2024.10613745> 2024
- Shu, H., Dawod, A.Y., Tepsan, W., Mou, L., & Tang, Z. (2024). Multi-channel Microseismic Signal Classification with Convolutional Neural Networks. \*IAES International Journal of Artificial Intelligence (IJ-AI)\*, 13(1), 1038-1049. <https://doi.org/10.11591/ijai.v13.i1.pp1038-1049> 2024
- Shu, H., Dawod, A.Y., Mu, L., & Tepsan, W. (2023). A Survey of Machine Learning Applications in Microseismic Signal Recognition and Classification. In \*2023 15th International Conference on Software, Knowledge, Information Management and Applications (SKIMA)\*, Kuala Lumpur, Malaysia, pp. 18-23. <https://doi.org/10.1109/SKIMA59232.2023.10387351> 2023
- Ran, X., Zhou, X., Lei, M., Tepsan, W., & Deng, W. (2021). A Novel K-Means Clustering Algorithm with a Noise Algorithm for Capturing Urban Hotspots. \*Applied Sciences\*, 11(23), 11202. <https://doi.org/10.3390/app112311202> 2021
- Blecher, D.P., & Tepsan, W. (2021). Real Operator Algebras and Real Positive Maps. \*Integral Equations and Operator Theory\*, 93, 49. <https://doi.org/10.1007/s00020-021-02665-1> 2021

## ACADEMIC EXPERIENCES

- Research on Human Action Recognition Project using Skeleton Database with NECTEC Jun 2022-Now
- Training in Super AI Engineer Season Program organized by Artificial Intelligence Association of Thailand (AIAT) [certificate: <https://aiat.or.th/cert/files/SuperAIEngineer2021/EN-SuperAI2-019.png>] Nov 2021-Aug 2022
- Training in Agricultural Data Scientist Program organized by Faculty of Science and Industrial Technology, Prince of Songkla University, Surat Thani Campus July 2022
- Co-Researcher: The study of growth poles of the Northern Economic Corridor Project, Thailand (Grant from the Ministry of Higher Education, Science, Research and Innovation, Thailand) 2021
- PhD Thesis: Real Operator Spaces, Real Operator Algebras and Real Jordan Operator Algebras 2020
- Master's degree Thesis: Triangular Mean-Value Functional Equation 2012
- Senior Research: Algorithms for Solving Periodic Pentadiagonal Linear System and Inverting Periodic Pentadiagonal Matrices 2010
- Mini Project: Algorithm for Finding Shortest path in Chiang Mai City 2008

## EMPLOYMENT

- Lecturer at International College of Digital Innovation, Chiang Mai University, Thailand Dec 2020 - Current
- Special Expert at International College of Digital Innovation, Chiang Mai University, Thailand Aug 2020 - Dec2020
- Teaching Assistance at University of Houston, TX, USA 2015- 2020
- Tutor (Self Employed) for secondary and high school students in Math, BKK, Thailand 2010- 2013
- Teaching assistance in Real Analysis (2010 term 1), Numerical Analysis (2010 term 2), and Calculus (2012 summer) at Chulalongkorn University, BKK, Thailand 2010, 2012

## EDUCATION

- PhD in Mathematics from University of Houston, Texas, USA 2015-2020
- Studied for PhD in Mathematics but then moved to University of Houston Ohio University, Ohio, USA (did not graduate) 2013-2015
- Master of Science in Mathematics from Chulalongkorn University, Bangkok, Thailand 2010-2013
- Bachelor of Science in Mathematics (Minor in Computer Science) from Chiang Mai University, Chiang Mai, Thailand 2006-2010

## HONORS AND AWARDS

- Abroad fellowship from the Institute for the Promotion of Teaching Science and Technology Project (DPST), Ministry of Education, Thailand 2013-2018
- Scholarship from Development and Promotion of Science and Technology Talents Project (DPST), Ministry of Education, Thailand 2003-2013
- Scholarship from Junior Scientist Talent Project (JSTP), Thailand 2007

## SKILLS

- Computer Language Python