

Dittaya Wanvarie

Assistant Professor

CONTACT

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TEACHING

Jul 2012 – Present	Department of Mathematics and Computer Science, Faculty of Science, Chulalongkorn University
2015 – Present	Special lecturer, School of Engineering and School of Information Technology, King Mongkut Institute of Technology Lad Krabang
Jan 2024 – Dec 2025	Special lecturer, Mahidol University Amnatcharoen Campus, Medical Science program
2015 – 2016	Special lecturer, Faculty of Science and Information Technology, Bangkok University

EDUCATION

Mar 2008 – Oct 2011	Ph.D. (Computational Intelligence and Systems Science) Thesis: Active Learning with Partially Annotated Sequence. Advisor: Prof. Dr. Manabu Okumura Tokyo Institute of Technology
Apr 2006 – Mar 2008	M.Eng. (Computational Intelligence and Systems Science) Advisor: Prof. Dr. Manabu Okumura Tokyo Institute of Technology
Jun 2001 – Mar 2005	B.Eng. (Computer Engineering) Advisor: Prof. Dr. Boonserm Kijssirikul Chulalongkorn University

COURSES

cloud architecting, introduction to data science, machine learning, basic computer programming (C, Python), compiler construction, operating systems, computer systems, data structures and algorithms, theory of computation

PROFESSIONAL MEMBERSHIP

ACM Professional membership since August 2018 (Membership ID 2212872)

CERTIFICATIONS

- [Google Cloud - Professional Cloud Architect Certification](#) since Dec 2024
- [Google Cloud - Professional Machine Learning Engineer Certification](#) since February 2026
- [AWS Certified Solutions Architect - Professional](#) since December 2025
- [AWS Certified SysOps Administrator - Associate](#) since July 2024
- [AWS Certified Developer - Associate](#) since July 2023
- [AWS Certified Solutions Architect - Associate](#) since July 2020
- [Microsoft Certified: Azure Fundamentals](#) since December 2020

PROJECTS

May 2022 – Present	Cloud solution architect, myCourseVille assessment platform
Jan 2025 – Apr 2025 and May 2024 – Aug 2024	Data analyst for Medical Hub Survey Data, Department of Health Service Support, Ministry of Public Health
Oct 2023 – Sep 2024	IT Consultant, National Credit Bank Project, Ministry of Higher Education, Science, Research and Innovation
Oct 2023 – Jun 2024	Chatbot Consultant, Lumiverse Project, Lumio 3D
Jun 2023 – Jan 2024	Cloud solution architect, Chulaverse
Oct 2022 – Sep 2023	AI expert, AI for Mental Health Project, Chulalongkorn University
Apr 2022 – Mar 2023	IT Consultant, Real Time Location System Project, SCGP
Aug 2020 – 2022	AI expert, CPF Project, UTC Chulalongkorn University
Jan 2019 – Aug 2023	Advisory Board, ACAYA.ai
Dec 2018 – May 2020	Part-time consultant for the data science team, Tencent Thailand

CURRENT RESEARCH

- Knowledge graph construction from annual reports in SET
- Automated evaluation of students' exam paper
- Neurodegenerative disease detection from recorded speech

PUBLICATIONS

AI Grading

- Sakchote Khemmarach, Kasidech Aewsrisakul, Norasetha Somboon, Chulaporn Kongkeo, Dittaya Wanvarie. [Adaptive Prompt-Based AES: A Teacher-AI Collaborative System for Improving Essay Scoring Accuracy over Time](#). TALE (2025).

Document processing, financial data processing

- Kittiphath Leesombatwathana, Natthawut Kertkeidkachorn, Dittaya Wanvarie. [Effect of Multilingual and Translation-Augmented Data on Multilingual and Language-Specific BERT Models for Promise Verification](#). iSAI-NLP (2025).
- Kittiphath Leesombatwathana, Wisarut Tangtemjit, Dittaya Wanvarie. [CSCU at SemEval-2025 Task 6: Enhancing Promise Verification with Paraphrase and Synthesis Augmentation: Effects on Model Performance](#). [Best System Paper for Task 6: PromiseEval@SemEval-2025](#) (2025).
- Naphattha Chinaksorn, Dittaya Wanvarie. [LLM-RAG for Financial Question Answering: A Case Study from SET50](#). ICAIIC (2025).
- Tse Lin Liu, Dittaya Wanvarie. [Enhancing Financial Market Predictions in Taiwan: A Hybrid Approach of Traditional Analysis and Machine Learning Techniques](#). TIMES-iCON (2024).
- Phanthakan Kiatphaisansophon, Dittaya Wanvarie, Nagul Cooharajanane. [Efficient Text Bounding Box Identification Using Mask R-CNN: Case of Thai Documents](#). IEEE Access. (2024) Volume 12, 1 April 2024, pp. 49306 - 49328.

Neurodegenerative disease detection from recorded speech

- Gun Wirojburapa, Dittaya Wanvarie. [Dementia Detection Using Transfer Learning from Recorded Speech](#). KST (2025).
- Wiput Thirapanish, Pittipol Kantavat, Dittaya Wanvarie, Ekapol Chuangsuwanich, Proadpran Punyabukkana. [Evaluating Machine Learning-Based Feature Selection Methods for Diagnosing Parkinson's Disease under the SVM Framework](#). ICAIBD (2024) pp. 409 - 415.
- Pimarn Kantithammakorn, Proadpran Punyabukkana, Ploy N. Pratanwanich, Solaphat Hemrungronj, Chaipat Chunharas, Dittaya Wanvarie. [Using Automatic Speech Recognition to Assess Thai Speech Language Fluency in the Montreal Cognitive Assessment \(MoCA\)](#). Sensors. (2022) Volume 22, Issue 4, pp. 1583.
- Suppat Metarugcheep, Proadpran Punyabukkana, Dittaya Wanvarie, Solaphat Hemrungronj, Chaipat Chunharas, Ploy N. Pratanwanich. [Selecting the Most Important Features for Predicting Mild Cognitive Impairment from Thai Verbal Fluency Assessments](#). Sensors. (2022) Volume 22, Issue 15, pp. 5813.
- Wirot Treemongkolchok, Proadpran Punyabukkana, Dittaya Wanvarie, Ploy N. Pratanwanich. [An Analysis of Acoustic Features for Attention Score in Thai MoCA Assessment](#). iSAI-NLP (2022).

MyCourseVille system architecture

- Sirawit Tantiphuwanart, Nuengwong Tuaycharoen, Dittaya Wanvarie, Naruemon Pratanwanich, Atiwong Suchato. [Performance Improvement on a Learning Assessment Web Application Using AWS DynamoDB as a Cache Database.](#) Proceedings of the 2023 20th International Joint Conference on Computer Science and Software Engineering (JCSSE). (2023).
- Supagid Gidvarowart, Atiwong Suchato, Dittaya Wanvarie, Naruemon Pratanwanich, Nuengwong Tuaycharoen. [Automated API Testing with Karate Framework: A Case Study of an Online Assessment Web Application.](#) Proceedings of the 2023 20th International Joint Conference on Computer Science and Software Engineering (JCSSE). (2023).
- Tatchanon Srisamudh, Atiwong Suchato, Dittaya Wanvarie, Naruemon Pratanwanich, Nuengwong Tuaycharoen. [Automatic User Interface Testing for Web Application with Cypress Framework: A Case Study of an Online Assessment Web Application.](#) Proceedings of the 19th National Conference on Computing and Information Technology (NCCIT 2023). (2023).
- Watcha Sasawattakul, Atiwong Suchato, Dittaya Wanvarie, Naruemon Pratanwanich, Nuengwong Tuaycharoen. [Design and Development of the Back-End System for an Online Learning Assessment Platform.](#) Proceedings of the 26th International Annual Symposium on Computational Science and Engineering (ANSCSE). (2023).
- Subtawee Hanyut, Nuengwong Tuaycharoen, Naruemon Pratanwanich, Dittaya Wanvarie, Atiwong Suchato. [Cost-Sensitive Cloud Architecture for an Online Assessment Web Application.](#) Proceedings of the 26th International Annual Symposium on Computational Science and Engineering (ANSCSE). (2023).

Contextual advertising, lightly-supervised learning

- Yiping Jin, Akshay Bhatia, Dittaya Wanvarie, Phu T. V. Le. [Towards improving coherence and diversity of slogan generation. Natural Language Engineering.](#) (2023) Volume 29, Issue 2, March 2023, pp. 254 - 286.
- Yiping Jin, Dittaya Wanvarie, Phu T. V. Le. [Learning from Noisy Out-of-Domain Corpus Using Dataless Classification.](#) Natural Language Engineering. (2022) Volume 28, Issue1, January 2022, pp. 39 - 69.
- Yiping Jin, Vishakha Kadam, Dittaya Wanvarie. [Plot Writing From Pre-Trained Language Models.](#) INLG (2022). pp. 52--67.
- Charoenphakdee N., Lee J., Jin Y., Wanvarie D., Sugiyama M. [Learning Only from Relevant Keywords and Unlabeled Documents.](#) Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP). (2019). pp. 3993--4402.
- Jin Y., Wanvarie D., Phu L. [Combining Lightly-Supervised Text Classification Models for Accurate Contextual Advertising.](#) Proceedings of the Eighth International Joint Conference on Natural Language Processing (Volume 1: Long Papers). (2017). pp. 545--554.

Speech, music processing

- Kamtue K., Euchukanonchai K., Wanvarie D., Pratanwanich N. [Lukthung Classification Using Neural Networks on Lyrics and Audios.](#) Proceedings of the 2019 International Computer Science and Engineering Conference (ICSEC). (2019). pp. 269--274.

- Chuwatthananurux S., Wanvarie D. [Improving noise estimation with RAPT pitch voice activity detection under low SNR condition.](#) Proceedings of 2016 8th International Conference on Knowledge and Smart Technology (KST). (2016). pp 77--82.

Corpus construction

- Wanvarie D., Ek-atchariya S., Kaewwipat T. [Unsupervised construction of a word list on tourism from Wikipedia.](#) Proceedings of the 2015 International Computer Science and Engineering Conference (ICSEC). (2015). Article ID 7401412.

Sequence alignment

- Wanvarie D. [Thai Grapheme-Phoneme Alignment: Many-to-Many Alignment with Discontinuous Patterns.](#) Proceedings of the 6th Asian Conference on Intelligent Information and Database Systems. (2014). pp. 63--72.

Semi-supervised learning

- Wanvarie D., Takamura H., Okumura M. [Active Learning with Subsequence Sampling Strategy for Sequence Labeling Tasks.](#) Journal of Natural Language Processing Vol.18 No.2 (June 2011). pp. 153--173.
- Wanvarie D., Takamura H., Okumura M. [Accelerating the Sequence Annotation using Split Annotation with Active Learning.](#) International Journal of Computational Linguistics and Applications. Vol.2 No. 1-2 (Jan-Dec 2011). pp. 105--119.
- Wanvarie, D., Takamura H., Okumura M. [Active Learning with Partially Annotated Sequence.](#) IPSJ SIG Notes 2010-NL-198(4), pp. 1--7.
- Wanvarie D., Takamura H., Okumura M. [Active Learning for Sequence Labelling with Probability Re-estimation.](#) Proceedings of the 11th Pacific Rim international conference on Trends in artificial intelligence. (2010). pp. 681--686.
- Wanvarie D., Takamura H., Okumura M. [Simplicity Bias for Semi-Supervised Parser.](#) 言語処理学会 第 14 回年次大会 (2008). pp. 83--86.