

Tony

Email: tonytan.tanapon@gmail.com | Tel: +1-202-498-4658 | Linkin: [linkedin.com/in/tonytan-tanapon/](https://www.linkedin.com/in/tonytan-tanapon/)
GitHub&Website: [tonytan-tanapon.github.io/](https://github.com/tonytan-tanapon) | Authorized to work in the US

CAREER HIGHLIGHT

- 7+ years of proficiency in **Mathematics and Computer Science** as a professor at a top-ranked international university, and 2+ years as a Software engineer in a financial technology company.
- 10+ years of coding experience with **C, C++, Java, Python and SQL**.
- 6+ years of research experience in **AI, Deep learning, and Machine learning** and experience in various libraries and frameworks such as **Tensor flow, PyTorch** Scikit-learn, and Re.
- Proficient in core **data structure and algorithms, software development, web development**, and excellent experience in **SQL and NoSQL** database management.

TECHNICAL SKILLS

- **Programming languages:** Java, C, C++, C#, JavaScript, Python, R, Prolog, SQL, .Net, PHP, HTML.
- **Libraries:** Tensor flow, Pytorch, Keras, Scikit-Learn, Pandas, NumPy, NLTK, Matplotlib, Re, Seaborn.
- **Analytics Tools:** Power BI, Tableau, Microsoft Visio, Microsoft Excel.
- **Modeling Techniques:** Statistic Analysis, Data Mining, Data Visualization, Web Scraping, Linear Regression, Logistic Regression, CNN, RNN, LSTM, LLM, Transformer, K-mean Clustering, A/B Testing

PROFESSIONAL EXPERIENCE

Mathematics and Computer Science Professor

May 2018 – Jan 2024

Mahidol University, Thailand

- Prepared and delivered lectures to a diverse group of Thai and international undergraduate students in more than 15 subjects and more than 1,000 students in mathematics and computer science courses, including **Deep learning, Natural Language Processing (NLP)**, Data Science, Database Management, Java and Web Programming, Mobile Application Programming, Software Engineering, as well as Calculus and Ordinary Differential Equations.
- Selected as an advisor and guided more than 30 senior projects including image classification, object detection, deep learning, CNN, text classification, NLP, sentiment analysis, recommendation system, and mobile applications with varieties of programming languages and libraries including Python, TensorFlow, PyTorch, Scikit-learn, Java MySQL and NoSQL. The project results' accuracy was increased by 15-20% individually.
- Published research focused on imbalance text classification with large datasets, resulting in increasing its accuracy and efficiency by 10%.
- Contributed to the academic community by reviewing research papers for international journals and conferences.

Computer Science Professor

July 2017 - March 2018

Rajamangala University of Technology Thanyaburi, Thailand

- Developed and delivered engaging lectures for more than 200 undergraduate students in diverse subjects, including **Artificial Intelligence**, Information Systems, and Database Administration.
- Provided guidance and supported 15 senior projects, as their advisor, within the field of Computer Science using C, C++, and Python.
- Published research focused on stock movement analysis and increased the prediction accuracy by 17%.

Software Engineer

Jan 2016 - June 2017

Polar Bear Technology Group Co., Ltd, Bangkok, Thailand

- Analyzed the stock market movements of the United States, China, and Thailand.
- Created an automatic trading system using Java language via Trader WorkStation (TWS) API. With a winning rate of 80%.
- Tested software to eliminate bugs, fixed the program, and developed its speed. Increased overall program efficiency by approximately 10%.

EDUCATION

- **Doctor of Philosophy** (Computer Science), GPA: 4.0 Nov 2010 - Sep 2016
Kasetsart University, Thailand
- **Master of Science** in Computer Science, GPA: 3.68 June 2008 - May 2010
Kasetsart University, Thailand
- **Bachelor of Science** (Computer Science), GPA 3.61 (first-class honors) May, 2004 - April, 2008
Khonkaen University, Thailand

SCHOLARSHIP AND FUND

Mahidol University Fund, Thailand

2022

- Proposed MeanTIDIF which is a novel term weighting scheme for imbalanced text classification in tokenization step.
- Published in an International Journal of Computing and Informatics, 2022

Thailand Research Fund (TRF), Thailand

2016

- Proposed a novel algorithm for fact handling in a legal expert system.
- Published in The Journal of King Mongkut's University of Technology North Bangkok, 2016

Institute of Information (NII), Internship, Tokyo, Japan

2014

- Researched and developed logic programming and legal reasoning algorithms.
- Published in a paper at the International Conference on Intelligent Computing, 2014.

Konrad Adenauer Stiftung Fund, Germany

2008

- Designed a database and user interface for the Legal Informatics Center Thailand, utilizing PHP and MySQL technologies.
- Developed and deployed a website for the Legal Informatics Center Thailand (currently out of service). The website featured a registration system, search system, web board, and database system.

PUBLICATIONS

Journal

- **A Novel Term Weighting Scheme for Imbalanced Text Classification**, An International Journal of Computing and Informatics, vol 46, no 2, 259–268, 2022. (Link: <https://www.informatica.si/index.php/informatica/article/view/3523>)
- **LegalEX: An Expert System for Law Firm**, the Intelligent Decision Technologies, vol 10, pp. 315–328, 2016. (Link: <https://content.iospress.com/articles/intelligent-decision-technologies/idt258>)

International Conference

- **Stock Market Movement Prediction using LDA**, 19th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD). 2018. (Link: <https://ieeexplore.ieee.org/abstract/document/8441038>)
- **Legal reasoning engine for civil court procedure**. Intelligent Computing Methodologies: 10th International Conference, ICIC, pp 500-512. 2014. (Link: https://link.springer.com/chapter/10.1007/978-3-319-09339-0_51)
- **Supreme Court Sentences Retrieval using Thai Law Ontology**, Intelligent Control and Computer Engineering, pp 177-189, 2011. (Link: https://link.springer.com/chapter/10.1007/978-94-007-0286-8_15)