Tony

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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 **Tenser 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:** Tenser 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, IOT 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 a variety 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)