

# Teerapong Panboonyuen (Kao)

[kaopanboonyuen.github.io](https://kaopanboonyuen.github.io)

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## CURRENT ROLES

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|---|---|
| <ul style="list-style-type: none"><li>• <b>MARS (Motor AI Recognition Solution)</b><br/>Senior Research Scientist (Artificial Intelligence Laboratory)<br/><a href="https://kaopanboonyuen.github.io/MARS/">https://kaopanboonyuen.github.io/MARS/</a></li></ul>          | Bangkok, Thailand<br><br>2022–present   |
| <ul style="list-style-type: none"><li>• <b>Chulalongkorn University</b><br/>Postdoctoral Researcher in AI (Advancing Geoscience Laboratory)<br/><a href="https://kaopanboonyuen.github.io/MeViT/">https://kaopanboonyuen.github.io/MeViT/</a></li></ul>                   | Bangkok, Thailand<br><br>2021–present   |
| <ul style="list-style-type: none"><li>• <b>College of Computing, Khon Kaen University</b><br/>Visiting Faculty (Visiting Lecturer in AI and Data Science)<br/><a href="https://kaopanboonyuen.github.io/SC310005">https://kaopanboonyuen.github.io/SC310005</a></li></ul> | Khon Kaen, Thailand<br><br>2021–present |

## EDUCATION

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| <ul style="list-style-type: none"><li>• <b>Postdoctoral Visiting Scholar (Geoscience AI)</b><br/>Chulalongkorn University, (h-index: 10)</li></ul> | 2021–2025 |
| <ul style="list-style-type: none"><li>• <b>Ph.D. Computer Engineering</b><br/>Chulalongkorn University, GPA: 4.00</li></ul>                        | 2018–2020 |
| <ul style="list-style-type: none"><li>• <b>M.Eng. Computer Engineering</b><br/>Chulalongkorn University, GPA: 4.00</li></ul>                       | 2016–2017 |
| <ul style="list-style-type: none"><li>• <b>B.Eng. Computer Engineering</b><br/>KMUTNB (Top 1% in University Mathematics)</li></ul>                 | 2012–2015 |
| <ul style="list-style-type: none"><li>• <b>Pre-Electrical Engineering (PET21)</b><br/>KMUTNB (Senior High School: 10th - 12th Grade)</li></ul>     | 2010–2012 |

## AWARDS

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### Scholarships and merit awards:

- [H.M. the King Bhumibhol Adulyadej's 72nd Birthday Anniversary Scholarship](#) (Master)

- [The 100th Anniversary Chulalongkorn University Fund for Doctoral Scholarship](#) (Ph.D.)
- [The 90th Anniversary of Chulalongkorn University Scholarship](#) (Ph.D.)
- [Ratchadapisek Somphot Fund for Postdoctoral Fellowship](#) (Chulalongkorn University, 2021, 2022, 2023, 2024, 2025)
- Top 1% Score in University [Differential Calculus](#) and [Engineering Mathematics](#)

#### Best paper awards:

- [2017 Best Student Paper Award](#) in International Conference on Computing and Information Technology ([IC2IT](#))
- [2019 Best Young Researcher Paper Award](#) in First International Conference on Smart Technology & Urban Development ([STUD](#))

#### Athletic achievements:

- [2022 Bangkok Marathon 42.195K Finisher](#) (Successfully completed a full marathon run) ([Bangkok Marathon](#))
- [2024 IRONMAN 70.3 Finisher](#) (1.9K swim, 90K bike ride, and 21.1K run) ([IM70.3](#))
- [2024 Laguna Phuket Triathlon Finisher](#) (1.8K swim, 55K bike ride, and 12K run) ([LPT](#))

#### Other recognitions:

- [2024 Distinguished Reviewer for the Bronze Level](#) of IEEE Transactions on Medical Imaging ([IEEE Transactions](#))
- [2025 Global Young Scientists Summit \(GYSS\) Scholarship](#) from Her Royal Highness Princess Maha Chakri Sirindhorn ([GYSS](#))

## PUBLICATIONS

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Google Scholar: <https://scholar.google.co.th/citations?user=myy0qDgAAAAJ&hl=en>

1. [Panboonyuen, Teerapong](#). SEA-ViT: Sea Surface Currents Forecasting Using Vision Transformer and GRU-Based Spatio-Temporal Covariance Modeling. \*arXiv preprint\* (2024). <https://arxiv.org/abs/2409.16313>
2. [Panboonyuen, Teerapong](#). REG: Refined Generalized Focal Loss for Road Asset Detection on Thai Highways Using Vision-Based Detection and Segmentation Models. \*arXiv preprint\* (2024). <https://arxiv.org/abs/2409.09877>
3. [Panboonyuen, Teerapong](#), et al. GuidedBox: A Segmentation-Guided Box Teacher-Student Approach for Weakly Supervised Road Segmentation. \*European Journal of Remote Sensing\* (2024). [Pending acceptance] <https://kaopanboonyuen.github.io/GuidedBox/>

4. **Panboonyuen, Teerapong**, et al. MeViT: A Medium-Resolution Vision Transformer for Semantic Segmentation on Landsat Satellite Imagery for Agriculture in Thailand. *\*Remote Sensing\** 15.21 (2023): 5124. <https://www.mdpi.com/2072-4292/15/21/5124>
5. **Panboonyuen, Teerapong**, et al. MARS: Mask Attention Refinement with Sequential Quadtree Nodes for Car Damage Instance Segmentation. *\*International Conference on Image Analysis and Processing\**. Cham: Springer Nature Switzerland, 2023. [https://link.springer.com/chapter/10.1007/978-3-031-51023-6\\_3](https://link.springer.com/chapter/10.1007/978-3-031-51023-6_3)
6. **Panboonyuen, Teerapong**, et al. Object Detection of Road Assets Using Transformer-Based YOLOX with Feature Pyramid Decoder on Thai Highway Panorama. *\*Information\** 13.1 (2022): 5. <https://www.mdpi.com/2078-2489/13/1/5>
7. **Panboonyuen, Teerapong**, et al. Transformer-Based Decoder Designs for Semantic Segmentation on Remotely Sensed Images. *\*Remote Sensing\** 13.24 (2021): 5100. <https://www.mdpi.com/2072-4292/13/24/5100>
8. **Panboonyuen, Teerapong**, et al. Semantic Labeling in Remote Sensing Corpora Using Feature Fusion-Based Enhanced Global Convolutional Network with High-Resolution Representations and Depthwise Atrous Convolution. *\*Remote Sensing\** 12.8 (2020): 1233. <https://www.mdpi.com/2072-4292/12/8/1233>
9. **Panboonyuen, Teerapong**, et al. Semantic Segmentation on Remotely Sensed Images Using an Enhanced Global Convolutional Network with Channel Attention and Domain Specific Transfer Learning. *\*Remote Sensing\** 11.1 (2019): 83. <https://www.mdpi.com/2072-4292/11/1/83>
10. **Panboonyuen, Teerapong**, et al. Road segmentation of remotely-sensed images using deep convolutional neural networks with landscape metrics and conditional random fields. *\*Remote Sensing\** 9.7 (2017): 680. <https://www.mdpi.com/2072-4292/9/7/680>
11. **Panboonyuen, Teerapong**, et al. An enhanced deep convolutional encoder-decoder network for road segmentation on aerial imagery. *\*International Conference on Computing and Information Technology\**. Springer, Cham, 2017. <https://www.mdpi.com/2072-4292/9/7/680>
12. **Panboonyuen, Teerapong**, et al. Image Vectorization of Road Satellite Data Sets. *\*Journal of Remote Sensing and GIS Association of Thailand\** (2017). <https://learn.gistda.or.th>
13. Wichakam, I., **Panboonyuen, T.**, Udomcharoenchaikit, C., and Vateekul, P. Real-Time Polyps Segmentation for Colonoscopy Video Frames Using Compressed Fully Convolutional Network. *\*International Conference on Multimedia Modeling\** (2018): 393-404. [https://link.springer.com/chapter/10.1007/978-3-319-73603-7\\_32](https://link.springer.com/chapter/10.1007/978-3-319-73603-7_32)
14. Vajeethaveesin, T., **Panboonyuen, T.**, et al. A Performance Comparison between GIS-based and Neural Network Methods for Flood Susceptibility Assessment in Ayutthaya Province. *\*Trends in Sciences\** 19.2 (2022): 2038. <https://tis.wu.ac.th/index.php/tis/article/view/2038>
15. Vateekul, P., **Panboonyuen, T.**, et al. Road map extraction from satellite imagery using connected component analysis and landscape metrics. *\*IEEE Big Data\** (2017): 3435-3442. <https://ieeexplore.ieee.org/document/8258330>

16. Chantharaj, S., **Panboonyuen, T.**, et al. Semantic Segmentation on Medium-Resolution Satellite Images Using Deep Convolutional Networks with Remote Sensing Derived Indices. \*JCSSE\* (2018): 1-6. <https://ieeexplore.ieee.org/document/8457378>
17. Kantavat, P., **Panboonyuen, T.**, et al. Transportation Mobility Factor Extraction Using Image Recognition Techniques. \*STUD 2019\*. <https://ieeexplore.ieee.org/document/9018796>
18. Intarat, K., **Panboonyuen, T.**, et al. Enhanced Feature Pyramid Vision Transformer for Semantic Segmentation on Thailand Landsat-8 Corpus. \*Information\* (2022). <https://www.mdpi.com/2078-2489/13/5/259>
19. Thitisiriwech, K., **Panboonyuen, T.**, et al. The Bangkok Urbanscapes Dataset for Semantic Urban Scene Understanding Using Enhanced Encoder-Decoder Networks. \*IEEE Access\* (2022). <https://ieeexplore.ieee.org/document/9779212>
20. Thitisiriwech, K., **Panboonyuen, T.**, et al. Quality of Life Prediction in Driving Scenes on Thailand Roads Using Deep Convolutional Neural Networks. \*Sustainability\* 15.3 (2023): 2847. <https://www.mdpi.com/2071-1050/15/3/2847>
21. Intarat, K., **Panboonyuen, T.**, et al. Deep Residual Neural Networks with Self-Attention for Landslide Susceptibility Mapping in Uttaradit Province, Thailand. \*arXiv preprint\* (2024). <https://kaopanboonyuen.github.io/MeViT/>

## SKILLS

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Python, Java, Processing, C, R, MATLAB, Golang, GCP, AWS, Docker-Compose, Kubernetes, Streamlit, Swagger UI, Git, RapidMiner Studio, Looker Studio, Tableau, Power BI, PyTorch, TensorFlow, Keras, Theano, Pandas, Scikit-Learn, Hugging Face, Gradio, GDAL, Beautiful Soup, Selenium, Plotly, Weights and Biases (WandB), TensorBoard, Retrieval-Augmented Generation (RAG), Large Language Models (LLMs).

[GitHub: kaopanboonyuen](https://github.com/kaopanboonyuen)

## OPEN SOURCE PROJECTS

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- **AI-Powered Image Recognition for Transportation Mobility Factors: A Quality of Life Perspective for Bangkok City:** <https://kaopanboonyuen.github.io/quality-of-life-ai-transportation/>  
Urban development hinges on improving the Quality of Life (QOL) for city inhabitants. Traditionally, QOL assessments rely heavily on questionnaire surveys, which, while informative, can be costly and time-consuming.
- **Medium-Resolution Vision Transformer for Semantic Segmentation on Landsat Satellite Imagery in Thailand:** <https://kaopanboonyuen.github.io/MeViT/>  
This project introduces MeViT (Medium-Resolution Vision Transformer), a novel approach tailored for Landsat satellite imagery of key economic crops in Thailand, including para rubber, corn, and pineapple.

- **Flood Risk Assessment in Ayutthaya Province:** <https://kaopanboonyuen.github.io/rainfall-prediction-a-machine-learning-approach>  
This project explores a variety of models, including Random Forest, Gradient Boosting, and Neural Networks, to build a predictive model using relevant features from the dataset.
- **The Bangkok Urbanscapes Dataset for Semantic Urban Scene Understanding Using Deep Learning:** <https://kaopanboonyuen.github.io/bkkurbanscapes>  
To further study self-driving cars in Thailand, we provide both the proposed methods and the proposed dataset in this project. We hope that our architecture and our dataset would help self-driving autonomous developers improve systems for driving in many cities with unique traffic and driving conditions similar to Bangkok and elsewhere in Thailand.

## PAST RESEARCH AND WORK EXPERIENCE

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- **MARS, Senior Research Scientist** Bangkok  
(Motor AI Recognition Solution)  
Lead Researcher: Kao Panboonyuen 2022–Present
  - Pioneered the development of the [MARS AI Model](#), presented at [ICIAP 2023, Italy](#).
  - Initiated projects on Explainable AI, Instance Segmentation, and Semantic Distillation.
  - Integrated APIs for auto insurance and garage service enhancements.
- **Khon Kaen University, Visiting Faculty** Khon Kaen  
Special Lecturer in AI and Data Science 2023–Present
  - Delivered courses such as [Artificial Intelligence](#) and [Smart Process Management](#).
  - Authored refined syllabi and received recognition via ministerial orders: [Order 5907-2566](#).
  - Authored refined syllabi and received recognition via ministerial orders: [Orders 660301.26-24844](#) and [660101.26-13320](#).
- **Chulalongkorn University, Postdoctoral Researcher** Bangkok  
Mentor: Chalermchon Satirapod 2022–Present
  - Researched sequence-to-sequence models for LULC classification on remote sensing corpora.
- **CJ Express Group, AI Research Scientist (Department Manager)** Bangkok, Thailand  
Manager: Narong Intiruk (CJ), Jarun Ngamvirojcharoen (TILDI) 2020–2021
  - Developed demand forecasting systems with PySpark and Cognitive Computing.
  - Improved time-series forecasting workflows for retail operations.
- **DEPA, Research Assistant (PT)** Bangkok  
(Digital Economy Promotion Agency)  
Manager: Preesan Rakwatin  
AI Development for Satellite and Aerial Imagery 2019–2020
  - Built segmentation models for multi-object detection on remote sensing images.

- Contributed to the creation of large-scale agricultural corpora databases.
- **Centaco Farm Company Limited, Data Scientist (PT)** Bangkok  
Applied AI for Livestock 2019–2020
  - Designed a hatchability prediction model for broiler chickens using regression analysis.
  - Solved quadratic relationships in breeder age and hatchability predictions.
- **GISTDA, Freelance AI Specialist** Bangkok  
(Geo-Informatics and Space Technology Development Agency)  
Manager: Siam Lawawirojwong 2016–2020
  - Developed LULC mapping systems using Vision Transformers and GNNs.
  - Built systems for forest fire classification in LANDSAT-8 satellite imagery.
- **Chulalongkorn University, Graduate Teaching Assistant** Bangkok  
Mentor: Peerapon Vateekul 2015–2022
  - Co-taught courses like **Big Data Tools** and **Data Science and Engineering**.
  - Delivered online courses on [Data Analytics and Big Data](#) via Chula MOOC.
- **Bangkok Innovation House, Lead Data Science Mentor (PT)** Bangkok  
Data Science Pathway Team, Chula MOOC Dec 2018–Jan 2020  
Manager: Pahnit Seriburi
  - Served as **Head TA** for the data science pathway team at [Chula MOOC](#).
  - Spearheaded volunteer teaching in Practical Data Analytics using RapidMiner and Python.
  - Delivered hands-on learning experiences, helping students gain practical skills in data science.

## SERVICE TO PROFESSION

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[More reviews can be found under my WoS ID: AAO-4985-2020](#)

### Invited Reviewers:

- IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)
- IEEE Transactions on Geoscience and Remote Sensing (Publisher: IEEE)
- IEEE Transactions on Artificial Intelligence (Publisher: IEEE)
- IEEE Transactions on Emerging Topics in Computational Intelligence (Publisher: IEEE)
- Pattern Recognition (Publisher: Elsevier)
- Neurocomputing (Publisher: Elsevier)
- Scientific Reports (Publisher: Nature)

- Computer Vision and Image Understanding (Publisher: Elsevier)
- Computers and Geosciences (Publisher: Elsevier)
- Remote Sensing (Publisher: MDPI)
- Geo-spatial Information Science (Publisher: Taylor and Francis)
- Computer Methods in Biomechanics and Biomedical Engineering (Publisher: Taylor and Francis)
- Journal of Spatial Science (Publisher: Taylor and Francis)
- IEEE Transactions on Industrial Informatics (Publisher: IEEE)
- IEEE Transactions on Radiation and Plasma Medical Sciences (Publisher: IEEE)
- IEEE Transactions on Vehicular Technology (Publisher: IEEE)
- IEEE Transactions on Human-Machine Systems (Publisher: IEEE)
- IEEE Transactions on Circuits and Systems for Video Technology (Publisher: IEEE)
- International Journal of Remote Sensing (Publisher: Taylor and Francis)
- International Journal of Image and Data Fusion (Publisher: Taylor and Francis)
- International Journal of Imaging Systems and Technology (Publisher: Wiley)
- International Journal of Digital Earth (Publisher: Taylor and Francis)
- IEEE Intelligent Systems (Publisher: IEEE)
- IEEE Access (Publisher: IEEE)
- IET Image Processing (Publisher: IET)
- PLOS ONE (Publisher: Public Library of Science)
- Forests (Publisher: MDPI)
- Transactions in GIS (Publisher: Wiley-Blackwell)
- Transactions on Network Science and Engineering (Publisher: IEEE)
- IEEE Transactions on Consumer Electronics (Publisher: IEEE)
- Imaging Science Journal (Publisher: Maney Publishing)
- Cybernetics and Systems (Publisher: Taylor and Francis)
- Geocarto International (Publisher: Taylor and Francis)
- Engineering Reports (Publisher: Wiley)
- Journal of Agricultural Engineering (Publisher: Springer)

- International Journal of Pattern Recognition and Artificial Intelligence (Publisher: World Scientific)
- Open Geosciences (Publisher: De Gruyter)
- GMSARN International Journal (Publisher: GMSARN)
- Industrial Lubrication and Tribology (Publisher: Emerald Group Publishing Ltd.)
- IETE Technical Review (Publisher: IETE)
- Computational Intelligence and Neuroscience (Publisher: Hindawi)
- International Journal of Crowd Science (Publisher: Emerald Group Publishing Ltd.)
- Journal of Chemical Engineering of Japan (Publisher: The Society of Chemical Engineers, Japan)
- IET Computer Vision (Publisher: IET)
- Electronics Letters (Publisher: IET)
- Smart Science (Publisher: Taylor and Francis)
- Acta Oceanologica Sinica (Publisher: Springer)
- Part D: Journal of Automobile Engineering (Publisher: SAGE)
- Biomedical Engineering/Biomedizinische Technik (Publisher: De Gruyter)
- Journal of Intelligent Transportation Systems: Technology, Planning, and Operations (Publisher: Taylor and Francis)
- Robotica (Publisher: Cambridge University Press)
- Machine Intelligence Research (Publisher: Science Press)
- Human-centric Computing and Information Sciences (Publisher: Springer)
- Canadian Journal of Civil Engineering (Publisher: Canadian Science Publishing)
- IEEE Open Journal of Intelligent Transportation Systems (Publisher: IEEE)
- International Journal of Building Pathology and Adaptation (Publisher: Emerald Group Publishing Ltd.)
- Majlesi Journal of Electrical Engineering (Publisher: Majlesi University)
- Journal of Communications and Networks (Publisher: The Korean Institute of Communications and Information Sciences)
- Food Bioengineering (Publisher: Springer)
- AI in Precision Oncology (Publisher: Springer)
- IEEE Consumer Electronics Magazine (Publisher: IEEE)



- Journal of Vibration and Control (Publisher: SAGE)
- Nuclear Science and Techniques (Publisher: Springer)
- CAAI Transactions on Intelligence Technology (Publisher: Elsevier)
- ACM Transactions on Intelligent Systems and Technology (Publisher: ACM)
- Ultrasonic Imaging (Publisher: SAGE)

## PRESS

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- **The Leader Asia:** \*Dr. Teerapong and his team introduced their advanced AI for car damage detection at ICIAP 2023 in Udine, setting new accuracy standards with their innovative MARS model.\* Retrieved from: <https://theleaderasia.com>
- **Techsauce:** \*Highlighted their AI technology for automatic car damage assessment, earning recognition for excellence at ICIAP 2023 in Italy.\* Retrieved from: <https://techsauce.co>
- **LINE TODAY:** \*Showcased the MARS model at ICIAP 2023, noted for its high accuracy and setting new global standards in car damage detection.\* Retrieved from: <https://today.line.me>
- **Moneychat:** \*Reported the award-winning innovation in AI for car damage estimation presented at ICIAP 2023.\* Retrieved from: <https://moneychat.co.th>
- **Kaohoon:** \*Celebrated the award-winning success of MARS at ICIAP 2023.\* Retrieved from: <https://www.kaohoon.com>
- **Mitistock:** \*Introduced the MARS model, featuring advanced self-attention mechanisms for vehicle damage assessment in Thailand.\* Retrieved from: <https://www.mitihoon.com>
- **The Story Thailand:** \*Presented cutting-edge AI techniques in car wound detection, achieving high accuracy and setting international benchmarks.\* Retrieved from: <https://www.thestorythailand.com>
- **Media of Thailand:** \*Unveiled the MARS model at ICIAP 2023, recognized globally for its precision in car damage detection.\* Retrieved from: <https://www.mediaofthailand.com>
- **Thailand Insurance News:** \*Featured Dr. Teerapong's MARS model at ICIAP 2023 for its groundbreaking accuracy in car damage detection.\* Retrieved from: <https://thailandinsurancenews.com>
- **Chulalongkorn University:** \*Published a study on semantic road segmentation using deep convolutional neural networks.\* Retrieved from: <https://www.car.chula.ac.th>

## COMMUNITY SERVICE

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- **Young Scientists Quickfire Pitch** GYSS2025  
*National University of Singapore, Singapore*  
I presented MeViT, a Vision Transformer designed for high-precision segmentation of Landsat satellite images, at the Young Scientists Quickfire Pitch. This project aims to enhance geospatial data analysis using cutting-edge AI techniques. [More Details](#)
- **Exploring Careers as an AI Research Scientist** 2024  
*NSTDA, Pathum Thani, Thailand*  
I shared insights into AI career paths with high school students, discussing opportunities in both academia and industry while emphasizing my journey in generative AI research. [More Details](#)
- **Inspiring the Future of AI Innovations and Mastering LLM** 2024  
*KMUTNB, Bangkok, Thailand*  
I delivered a keynote to undergraduate students, focusing on the transformative impact of AI and advancements in Large Language Models (LLMs), such as ChatGPT. [More Details](#)
- **Geospatial Big Data Analytics** 2023  
*GISTDA, Pathum Thani, Thailand*  
I conducted a session on leveraging PySpark and distributed machine learning to analyze large-scale geospatial datasets, emphasizing the importance of interactive visualization tools for decision-making. [More Details](#)
- **Invited to Italy for ICIAP 2023 Presenting MARS Research** 2023  
*University of Udine, Italy*  
I presented my research on MARS, a model enhancing instance segmentation for car damage evaluation, at the ICIAP 2023 Workshop. [More Details](#)
- **Distributed Machine Learning Techniques for Geospatial Data** 2023  
*GISTDA, Pathum Thani, Thailand*  
I led a course on distributed machine learning, focusing on PySpark and TensorFlow for geospatial data applications, teaching efficient multi-GPU training strategies. [More Details](#)
- **Achieve Data Science First Meet** 2023  
*Victor Club, Samyan Mitrtown, Bangkok, Thailand*  
I spoke at a student event on the importance of data science and AI, advising on how organizations can leverage these technologies to stay competitive in the data-driven era. [More Details](#)

## TEACHING

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- **Visiting Faculty - College of Computing, Khon Kaen University** 2022 - Present  
*Khon Kaen, Thailand*  
I teach courses in Artificial Intelligence, Machine Learning, and Business Intelligence, including:
  - [SC310005 Artificial Intelligence and Machine Learning Application](#)
  - [CP020002 Smart Process Management](#)
  - [SC320002 Business Intelligence](#)

– CP020001 Introduction to Computers and Programming

- **Guest Lecturer and AI Committee Member - NSTDA One Day Camp** 2024  
*Sirindhorn Science Home, Thailand*  
Delivered a talk on AI research careers as part of the GYSS2025 scholarship program. [Full Blog and Slide](#)
- **Modern Integrated Survey Technology - Chulalongkorn University** 2023  
*Bangkok, Thailand*  
Guided students in applying machine learning techniques to survey engineering problems. [Invitation Letter](#)
- **AI Inspiration Course - Khon Kaen University** 2024  
*Khon Kaen, Thailand*  
Delivered a lecture on Generative AI: Current Trends and Practical Applications. [Lecture Slide](#)
- **The 7th KVIS Invitational Science Fair** 2024  
*Kamnoetvidya Science Academy, Rayong, Thailand*  
Served as a committee member for the AI project evaluation. [Invitation Letter](#)
- **Industrial Advisory Board (IAB) - ECE KMUTNB** 2024  
*Bangkok, Thailand*  
Contributed to curriculum assessment and provided feedback on course development. [Invitation Letter](#)
- **AI and ML Instructor - Nomklao Kunnathi Demonstration School** 2021  
*Bangkok, Thailand*  
Taught AI and ML in the Design Graphics Science curriculum for Grade 10 students. [Invitation Letter](#)
- **Deep Learning Instructor - Thammasat University** 2023  
*Bangkok, Thailand*  
Conducted a course on satellite data processing for advanced military and disaster missions. [Invitation Letter](#)
- **Senior Project Advisor - Thammasat University** 2022  
*Bangkok, Thailand*  
Advised senior geography students on AI-related projects. [Invitation Letter](#)
- **AI Instructor - Department of Lands, Thailand** 2024  
*Bangkok, Thailand*  
Delivered AI training on land title deed data analysis. [Course Link](#)

## Get to Know Me Better

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- **Tech Enthusiast and Endurance Athlete**  
I am deeply passionate about using technology to drive positive change. When not immersed in code or research, you'll often find me training for marathons and triathlons, pushing my physical and mental limits, and embracing the challenges that come with endurance sports.

- **AI and Machine Learning Advocate**

With a strong background in AI and deep learning, I thrive in developing solutions that leverage cutting-edge technologies. I take pride in transforming complex problems into scalable, efficient AI-driven solutions that can have a real-world impact.

- **Lifelong Learner**

I'm always on the lookout for new ways to learn and grow, whether through exploring the latest technological innovations, diving into groundbreaking research, or engaging in conversations with other curious minds. Knowledge is my fuel!

- **Passionate About Mentorship**

I believe in paying it forward by mentoring the next generation of engineers and developers. Sharing my knowledge and helping others achieve their potential is one of my greatest passions.

- **Adaptable and Solution-Oriented**

I enjoy tackling new challenges and thrive in dynamic environments. Whether it's developing custom machine learning models or leading teams through difficult projects, I always stay focused on delivering the best solutions.

- **Innovative Problem Solver**

I take a creative, innovative approach to problem-solving. From optimizing algorithms to enhancing system architectures, I look for ways to make systems smarter, faster, and more efficient.

- **Community-Oriented**

Volunteering is a big part of who I am. I love connecting with people, sharing knowledge, and giving back to the community. It keeps me grounded and motivated to keep pushing forward.

- **Team Player and Leader**

Whether collaborating with a team or leading a project, I prioritize communication, trust, and accountability. My leadership style is centered on empowering others and fostering a culture of creativity and collaboration.

- **Tech Trends Enthusiast**

I constantly stay updated with the latest in tech, from AI advancements to quantum computing. I love discussing emerging technologies and exploring how they will shape the future.

- **Data-Driven Decision Maker**

I rely on data to drive decisions, whether it's in research or business development. My passion lies in using data-driven insights to optimize strategies and create impact.

- **Resilient and Goal-Oriented**

Just as in my athletic pursuits, I approach challenges with resilience and determination. I believe in setting ambitious goals and relentlessly working towards them, whether in tech or personal development.

- **Let's Connect!**

If you're interested in discussing tech, research, or just want to share stories about the latest gadgets, feel free to reach out to me at [panboonyuen.kao@gmail.com](mailto:panboonyuen.kao@gmail.com).

- **About Me**

I'm [Teerapong Panboonyuen](#), but you can call me [Kao Panboonyuen](#) or just [Kao](#).