

Thai and Japanese Co-authored Peer-reviewed Academic Articles by the Project of Smart Transport Strategies for Thailand 4.0

In 2023, 2 papers

[Exploring the Spatial Effects of Built Environment on Quality of Life Related Transportation by Integrating GIS and Deep Learning Approaches](#)

Kitsaphon Thitisiriwech, Teerapong Panboonyuen, Pittipol Kantavat, Boonserm Kijirikul, Yuji Iwahori, Shinji Fukui, Yoshitsugu Hayashi
Sustainability, Feb 3, 2023, 15(3), Article ID 2847.

[Quality of Life Prediction in Driving Scenes on Thailand Roads Using Information Extraction from Deep Convolutional Neural Networks](#)

Pawinee Iamtrakul, Sararad Chayphong, Pittipol Kantavat, Yoshitsugu Hayashi, Boonserm Kijirikul, Yuji Iwahori
Sustainability, Feb 3, 2023, 15(3), Article ID 2785.

In 2022, 5 papers

Comparing Quality of Life between TOD and Non-TOD Area in Central Business District (CBD) of Bangkok, Thailand

Pawinee Iamtrakul, Pisinee Visuttiorn, Jirattikan Ammapa, Jirawan Klaylee, Sararad Chayphong, Yoshitsugu Hayashi
Proceedings of the 5th International Conference on Civil Engineering and Architecture-ICCEA, Dec 16-15, 2022, in press.

Quality of Life Determination based on Daily Commuting Experiences in Central Business District (CBD) of Bangkok, Thailand

Pawinee Iamtrakul, Pisinee Visuttiorn, Jirattikan Ammapa, Jirawan Klaylee, Sararad Chayphong, Yoshitsugu Hayashi
Proceedings of the 5th International Conference on Civil Engineering and Architecture-ICCEA, Dec 16-15, 2022, in press.

[The Bangkok Urbanscapes Dataset for Semantic Urban Scene Understanding Using Enhanced Encoder-Decoder With Atrous Depthwise Separable A1 Convolutional Neural Networks](#)

Kitsaphon Thitisiriwech, Teerapong Panboonyuen, Pittipol Kantavat, Yuji Iwahori, Boonserm Kijirikul
IEEE Access, May 20, 2022, 10, 59327- 59349.

[Extraction and Calculation of Roadway Area from Satellite Images Using Improved Deep Learning Model and Post-Processing](#)

Varun Yerram, Hiroyuki Takeshita, Yuji Iwahori, Yoshitsugu Hayashi, M. K. Bhuyan, Shinji Fukui, Boonserm Kijirikul, Aili Wang
Journal of Imaging, Apr 25, 2022, 8(5), Article ID 124

[Deep Neural Network for Estimating Value of Quality of Life in Driving Scenes](#)

Shinji Fukui, Naoki Watanabe, Yuji Iwahori, Pittipol Kantavat, Boonserm Kijirikul, Hiroyuki Takeshita, Yoshitsugu Hayashi and Akihiko Okazaki

Proceedings of the 11th International Conference on Pattern Recognition Applications and Methods – ICPRAM, Feb 3-5, 2022, 616-621.

In 2021, 6 papers**[Urban Rail Transit in Bangkok: Chronological Development Review and Impact on Residential Property Value](#)**

Varameth Vichiensan, Vasinee Wasuntarasook, Yoshitsugu Hayashi, Masanobu Kii, Titipakorn Prakayaphun

Sustainability, Dec 28, 2021, 14(1), Article ID 284

[Impact of Decentralization and Rail Network Extension on Future Traffic in the Bangkok Metropolitan Region](#)

Masanobu Kii, Varameth Vichiensan, Carlos Llorca, Ana Moreno, Rolf Moeckel, Yoshitsugu Hayashi

Sustainability, Nov 29, 2021, 13(23), Article ID 13196.

[COVID-19 Countermeasures and Passengers' Confidence of Urban Rail Travel in Bangkok](#)

Varameth Vichiensan, Yoshitsugu Hayashi, Sudarat Kamnerdsap

Sustainability, Aug 20, 2021, 13(16), Article ID 9377.

[Walkability Perception in Asian Cities: A Comparative Study in Bangkok and Nagoya](#)

Varameth Vichiensan, Kazuki Nakamura

Sustainability, Jun 16, 2021, 13(12), Article ID 6825.

[Assessment of Spatiotemporal Peak Shift of Intra-Urban Transportation Taking a Case in Bangkok, Thailand](#)

Masanobu Kii, Yuki Goda, Varameth Vichiensan, Hiroyuki Miyazaki, Rolf Moeckel

Sustainability, Jun 15, 2021, 13(12), Article ID 6777.

[Can Space–Time Shifting of Activities and Travels Mitigate Hyper-Congestion in an Emerging Megacity, Bangkok? Effects on Quality of Life and CO₂ Emission](#)

Witsarut Achariyaviriya, Yoshitsugu Hayashi, Hiroyuki Takeshita, Masanobu Kii, Varameth Vichiensan and Thanaruk Theeramunkong

Sustainability, Jun 8, 2021, 13(12), Article ID 6547.

In 2020, 3 papers**[A Grid-Based Spatial Analysis for Detecting Supply–Demand Gaps of Public Transports: A Case Study of the Bangkok Metropolitan Region](#)**

Apantri Peungnumesai, Hiroyuki Miyazaki, Apichon Witayangkurn, Sohee Minsun Kim

Sustainability, Dec 8, 2020, 12(24), Article ID 10382.

[Automatic Construction of Dataset with Automatic Annotation for Object Detection](#)

Naoki Watanabe, Shinji Fukui, Yuji Iwahori, Yoshitsugu Hayashi, Witsarut Achariyaviriya, Boonserm Kijsirikul

Procedia Computer Science, Oct 2, 2020, 176, 1763-1772.

[Interdependent Multi-task Learning for Simultaneous Segmentation and Detection](#)

Mahesh Reginthala, Yuji Iwahori, M. K. Bhuyan, Yoshitsugu Hayashi, Witsarut Achariyaviria, Boonserm Kijsirikul

Proceedings of the 9th International Conference on Pattern Recognition Applications and Methods, Feb 22-24, 2020, 167-174.

In 2019, 1 paper

[A Method of Data Augmentation for Classifying Road Damage Considering Influence on Classification Accuracy](#)

Haruki Tsuchiya, Shinji Fukui, Yuji Iwahori, Yoshitsugu Hayashi, Witsarut Achariaviria, Boonserm Kijsirikul

Procedia Computer Science, Oct 14, 2019, 159, 1449-1458.