

Appendix 2.2

Report of International Conference Presentation

Name: (Presenter)	Somnuk Phon-Amnuaisuk
Affiliation:	Universiti Teknologi Brunei
Project Title:	An IoT-based Data Collection and Analytics Framework using Bluetooth Proximity Beacons
Name of International Conference: (Link to website)	2023 8th International Conference on Business and Industrial Research https://icbir.tni.ac.th/
Title of Research Paper:	Non-GPS-Based ETA Models Constructed from Historical GPS Data and Traffic Contexts
Name of all Co-authors (if any)	Tan Soon Jiann, Kok Chin Khor, Tham Mau Luen, Yung-Wey Chong, Saiful Omar, Noor Farizah Ibrahim, Mohd Najwadi Yusoff, Idham Mashud
<p>Comments or feedback received at the conference: (e.g. Questions or comments received by your presentation)</p> <p>The paper was well received. There were mainly clarification questions regarding the tasks and the data collection process.</p>	
<p>Contribution to the project: (e.g. Summary of your session or other sessions related with your presentation)</p> <p>The paper introduces a novel method to estimate ETA for public transportation, even in the absence of real-time GPS data, by employing machine learning models based on historical GPS records.</p> <p>Three distinct approaches are utilized, namely statistical central tendencies, nonlinear regression techniques, and a predictive model that factors in the previous time spans on the same route. The study presents a comprehensive analysis of the feasibility of ETA estimation without real-time GPS data, and the proposed machine learning models demonstrate promising results.</p>	



ICT Virtual Organization of ASEAN Institutes and NICT (ASEAN IVO)

The contributions of this work include: (i) preprocessing bus service data using data analysis and visualization techniques, (ii) preparing benchmark datasets for further research, and (iii) constructing baseline models, including descriptive statistical models, regression models, and predictive models that serve as benchmarks for the prepared datasets.

Photos

I am not aware that I have to include photo in the report. Hence, I did not take any photo during the session. I have included the certificate of participant with this report instead.

[Required Documents]

- A) Presentation Materials (e.g. PPT slides)
- B) Final
Program of the conference

A handwritten signature in black ink, appearing to read 'Somnuk', is written above the reporter's name.

Reporter: Somnuk Phon-Amnuaisuk

Date: 24 May 2023

Special Session 2: Computational Intelligence and Transportation Systems



Session	Paper ID	Title	Presenter	Session chair
I1-1 SP2 May 18, 2023 1.00-2.45 PM	1570882839	Non-GPS-Based ETA Models Constructed From Historical GPS Data and Traffic Contexts	Somnuk Phon-Amnuaisuk	Assoc. Prof. Dr.Mongkut Piantanakulchai
	1570888084	Multi-Agent Traffic Light Controls With SUMO	Somnuk Phon-Amnuaisuk	
	1570881251	Addressing Data Scarcity in Thai Car Recognition Using Few-Shot Learning	Panumate Chetprayoon	
	1570883953	Towards Prediction of Bus Arrival Time Using Multi-Layer Perceptron (MLP) and MLP Regressor	Sharul Kamal Abdul Rahim	
	1570874814	Real Time Map Matching for Low Frequency GPS Data Based on Machine Learning Technology	Ornicha Sinthopvaragul	
	1570887517	Assessing the UAVs' Requirements and Capabilities for Humanitarian Logistics Operations in Thailand	Natthajira Yeh	

Session	Paper ID	Title	Presenter	Session chair
I2-1 SP2 May 18, 2023 3.00-5.00 PM	1570873997	Analyzing Travel Time Savings on Commuters' Decision to Use Transit Service Involving Transfers	Artinuch Ketchaichana	Prof. Dr.Somnuk Phon-Amnuaisuk
	1570882541	A Comparative Study on Satellite Image Analysis for Road Traffic Detection Using YOLOv3-SPP, Keras RetinaNet and Full Convolutional Network	Marielet Guillermo	
	1570882715	Analyzing Traffic-Complaint Tweets Based on Time-Location Context Analysis to Develop A Traffic Urgency Model	Berlian Lidiawaty	
	1570888596	Load Balancing in Multi Depot Pickup and Delivery Problem With Ant Colony Optimization	Teerawat Indravattana	
	1570888849	Fuzzy Logic Adaptive Bus Route Determination for Intelligent Transportation System of Buses Along Epifanio Delos Santos Avenue (EDSA)	Neil Oliver Velasco	