

## Appendix 2.2

### Report of International Conference Presentation

Name: (Presenter)	Jessada Karnjana
Affiliation:	National Electronics and Computer Technology Center
Project Title:	A Coastal Erosion Monitoring Platform Based on Wireless Sensor Networks and 3D Point Clouds from Airborne LiDAR
Name of International Conference: (Link to website)	The International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making (IUKM)  <a href="https://www.jaist.ac.jp/IUKM/IUKM2025/">https://www.jaist.ac.jp/IUKM/IUKM2025/</a>
Title of Research Paper:	Water Surface Level Estimation Based on the Fast Segment Anything Model for Coastal Monitoring Systems
Name of all Co-authors (if any)	Julathit Chetsawang, Kaweewat Sricharoenchit, Krittapak Jairak, Warit Yuvaniyama, Peeravich Teerapatanapan, Kittin Traisiwakul, Tawin Supmahaudom, Akkharawoot Takhom, Phutphalla Kong, Didin Agustian Permadi, Sharifah Hafizah Syed Ariffin, Kasorn Galajit, Surasak Boonkla, Jessada Karnjana
<p>Comments or feedback received at the conference: (e.g. Questions or comments received by your presentation)</p> <p>We've received positive feedback from the audience. Here are some of the questions and suggestions that were raised:</p> <p><b>Nighttime Experimentation:</b></p> <p>Question: How can the system handle night-time conditions when there is no light?</p> <p>Response: We explained that the system is designed to construct ground truth for wave height estimation using a wireless sensor network, so experiments are conducted during daytime. However, there are potential solutions for nighttime experiments, such as using an infrared camera.</p> <p><b>Licensing and Data:</b></p> <p>Question: There was a query about licensing and data access.</p> <p>Response: We clarified that the project data, including the source code, will be made available for academic purposes.</p>	

### Extreme Conditions:

Suggestion: One suggestion was to conduct experiments under extreme conditions, such as during strong winds and high waves.

Response: We appreciated this suggestion and noted that it could provide valuable insights into the system's performance under challenging environmental conditions.

### Contribution to the project:

(e.g. Summary of your session or other sessions related with your presentation)

The main theme of the session focused on applying machine learning for decision-making under uncertainty, which is also the focus of our presented paper. In our work, we aim to automatically estimate wave height from camera imagery. Due to the measurement noise and uncontrolled conditions in field experiments, the data are inherently noisy, necessitating robust decision-making under uncertainty. Many presentations at the conference explored similar themes, illustrating how these techniques can be applied across diverse domains.

### Photos





**[Required Documents]**

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

See the attached files for required documents.

**Reporter: Jessada Karnjana**

**Date: 31 March 2025**