

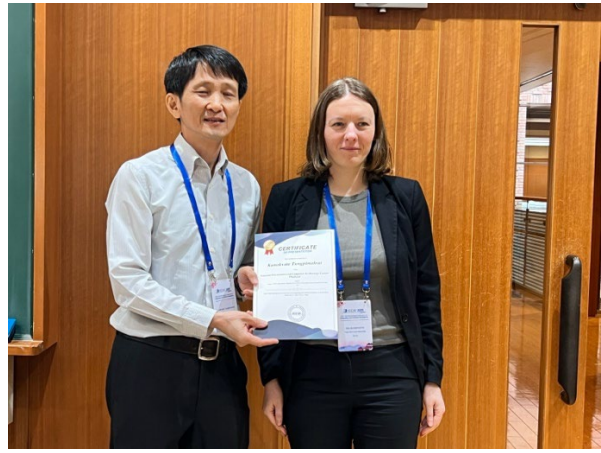
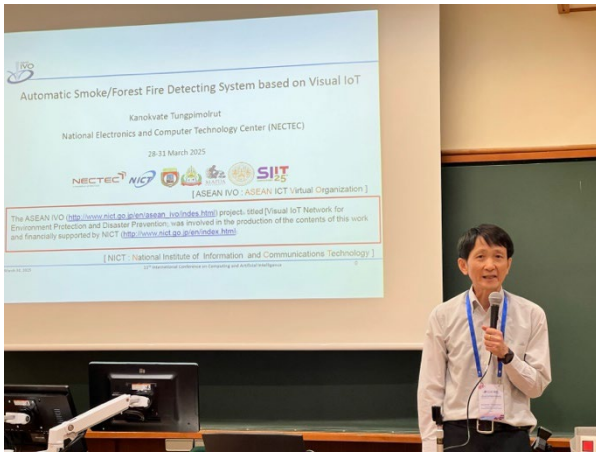


ICT Virtual Organization of ASEAN Institutes and NICT (ASEAN IVO)

Appendix 2.2

Report of International Conference Presentation

Name: (Presenter)	Kanokvate Tungpimolrut
Affiliation:	National Electronics and Computer Technology Center
Project Title:	Visual IoT Network for Environment Protection and Disaster Prevention
Name of International Conference: (Link to website)	2025 11th International Conference on Computing and Artificial Intelligence (https://www.iccai.net)
Title of Research Paper:	Automatic Smoke/ Forest Fire Detecting System based on Visual IoT
Name of all Co-authors (if any)	Kanokvate Tungpimolrut, Jessada Karnjana, Montri Chatpoj, Nathavuth Kitbutrawat, Praphan Pavarankoon, and Ken T. Murata
<p>Comments or feedback received at the conference:</p> <p>Q: How is LoRa communication used in this system?</p> <p>A: LoRa communication was used in the previous ASEAN IVO project. However, due to its bandwidth limitations, it is not used for transmitting images in this project.</p> <p>Q: How do you differentiate between smoke and clouds?</p> <p>A: This is one of the challenging issues in the project. Our dataset is relatively small and was collected during the rainy season, so some false detections still occur. In this paper, a segmentation model is integrated with the object detection model. This segmentation step provides detailed information about smoke coverage and distribution, which can potentially support mitigation efforts by estimating the size and direction of wildfire spread.</p>	
<p>Contribution to the project:</p> <p>The content of the work in the presented paper serves as a progress on the Thailand side to implement an automatic smoke/forest fire detecting system based on Visual IoT in the project.</p>	
Photos	



[Required Documents]

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

Reporter: _____ Kanokvate Tungpimolrut _____

Date: _____ 10 Apr 2025 _____