Mr. Rangsan Khamkhon

Asian Institute of Technology (AIT), Thailand. 58 Moo 9 Phaholyothin Highway, Pathumthani 12120, Thailand. Phone: +669 5494 6554, Email: <u>Rangsan.khamkhon@gmail.com</u>

PROFILE

- Date of birth: 25 December 1996
- Gender: Male
- Nationality: Thai

EDUCATION

• 2015 – 2019 [Bachelor of Science, B.Sc.]

The Development Geography for Resources Management Field of Study (FoS) at Mahasarakham University, Thailand. Senior project: Estimation of Sugarcane Yield using ground data and Sentinel-1 image time series in Kumphawapi district, Udon Thani province, Thailand.

• 2020 – 2022 [Studying Master degree]

The Remote Sensing & Geographic Information Systems (RS&GIS) Field of Study (FoS) at Asian Institute of Technology (AIT). Project: Determination of drought index for sugarcane crop using Potential Evapotranspiration and Global Navigator Satellite System (GNSS) – Precipitable Water Vapor (PWV) data.

WORK EPRIENCE

 2019 – 2020 [Research Associate]
Asian Institute of Technology (AIT), Thailand. Project: The Development of Geoinformatics and Precision Agriculture Technology for Administration and Management of oil palm plantations

RESEARCH AREAS (Skill)

Image processing

- Object detection.
- Image smoothing.
- Edge detection.
- Image filtering.
- Perspective transformation.
- Image alignment / registration.

Classification model

- Random forest classification

Data management for geospatial data

- PostgreSQL.
- Geo-server

Python programming

- Machine learning model
- Image processing

UAV image (flying, planning, processing and Application)

- Photogrammetry and surveying
- Vegetable index estimation
- Agriculture crop yield estimation
- Monitoring agriculture heath and time series of crop cycle

GNSS Technology

- GNSS processing data
- RTK apply with UAV image

Geospatial modeling using GIS

- analyze spatial relationships
- patterns of geographic features
- Mapping

RESEARCH INTEREST

- forecasting Climate Change model
- Remote sensing application for air quality model
- Geospatial modeling for air quality monuments