Academic Experience

1. Football Player Segmentation and Tracking Using SiamMask and DeepSORT

- Programming Language: Python
- Tags: DeepSORT, SiamMask
- Objective: Track a football alongside the player who controls the ball in a football match.
- Use Case: Automated camera in a football match.
- Overview: Overview of the Algorithm
- Results: Results of football player being tracked

2. Web Based Technologies to Design an Organization Membership Management System

- Web Framework: Django
- Programming Language: Python
- Database: SQLite
- Tags: FaceX-Zoo, EasyOCR
- Objective: Develop a management system for the organizations that require memberships (Prototype: gym management system).
- Use Case: Organization management system that includes face recognition of members and automated membership management.
- Prototype Features: Features Included in the System
- Prototype Database: Database Tables and Their Relationships
- Prototype Website Overview: Overview of the Website
- Readings: Research Report, Presentation

Professional Experience

1. Vehicle and License Plate Recognition

- Programming Language: Python
- Tags: YOLOv5, DeepSORT, ResNet18
- Database & Search Engine: Elasticsearch
- Use Case: Save the recognition results of vehicles which enter and exit the premises to the database.
- Demo: Examples

2. Face Detection and Face Recognition

- Programming Language: Python
- Tags: FaceX-Zoo
- Database & Search Engine: Elasticsearch
- Use Case: Detect and save the face feature to the database and use saved face feature to recognize or verify the user.
- Demo: Output video, csv output, and output images

3. Developed OCR Systems

- Water Meter OCR
- Bank Book OCR
- Passport OCR
- Thai National ID Card OCR
- Thai driving License OCR

4. Text / Document Classification

- Programming Language: Python
- Tags: rembg, PyCaret, Pandas, NLP, Logistic Regression
- Use Case: Classify the type of a document (for example national Id card, bank book, medical certificate, invoice, etc)

5. Signature Detection and Recognition

- Programming Language: Python
- Tags: YOLOv5, OpenCV, Tensorflow, Keras
- Use case: Detect and verify the signatures on electronic documents that require verification