

Napattarapon Pranmontri

Data Scientist

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EDUCATION

Chulalongkorn University
B.Eng. in Industrial Engineering GPAX: 3.46

SKILLS

Programming

Languages Python, R, SQL, Java
Data base & BI Microsoft SQL server, PowerBI, Tableau
Statistical tool Octave, Matlab, Minitab, Excel, Simio

Language

English intermediate level (Toeic 865/990)
Japanese beginner level (Certified by JLPT N4)

PROJECT & COMPETITIONS

Shopee code league 2020 competition

2020/06 - 2020/08

- Product detection: Worked with 3 team members to develop an ensemble model of Resnet152, Inception Resnet V2 and Inception V3 to classify various product categories based on product images from Shopee seller using Fastai2, Pytorch (63rd from 823 teams).
- Machine translation: Used MUSE (Multilingual Unsupervised and Supervised Embeddings) to align two word embedding vectors which share the same domain knowledge to translate Chinese products name in to English.
- Sentiment analysis: Built an ensemble model of GPT-2, Roberta and BERT for predicting review score (1-5 stars) from user product review in Shopee platform (2nd from 356 teams).
- Marketing analysis: Applied resampling techniques, Tomek link and SMOTE, to reduce imbalance of labels and generated an ensemble of Light gradient boosting machine, Catboost and Xgboost to predict whether a user opens the emails sent by Shopee (16th from 368 teams).
- Detected sellers who perform a fake transaction to boost their sales/shop ratings using dictionary, Python, for efficient searching.

Image processing for COVID 19 diagnosis form, Pedthaisupai by Thailand Tech Startup Association

2020/03 - 2020/06

- Performed various image preprocessing techniques, including affine transform, contour finding, cropping and pixel checking in checkbox to extract information from medical diagnosis form using OpenCV Python.

Blindness detection using image classification, Aravind eye hospital, India

2019/10 - 2020/04

- Implemented transfer learning with Convolutional Neural Networks, Resnet50 and Efficientnet B5, on retinal images for rating the severity levels of Diabetic Retinopathy using Keras, Tensorflow.
- Handled with imbalanced data using weighted balanced loss function and data augmentation to improve Sensitivity of minority classes.
- Used image preprocessing techniques, including circle crop, color and light adjusting, for making important details in the image more easily detected which result in the better classification performance of the CNNs model.

Solar irradiance forecasting at faculty of engineering, Chulalongkorn University

2020/02 - 2020/04

- Performed feature selection using Lasso regression and created new features which describe trend of solar irradiance.
- Avoided yearly seasonal effect of irradiance by splitting dataset into bi-monthly batches of training, validation and testing.
- Built tree-based models, including Decision tree, Random forest and Xgboost, and linear models to predict solar intensity.

Winner of CU TOYOYA Ha:mo open innovation contest

2018/10 - 2019/02

- Cooperated with 4 team members to design driving rules of electric car-sharing service, Toyota Hamo, which improve safety consciousness and also identified risks.
- Applied a gamification theory to design a Hamo application feature which improves driver behavior.

WORK EXPERIENCES

Data analyst at Terra BKK consulting, Bangkok, Thailand

2019/07 - 2019/08

- Scraped the data from real estate reviewing websites using BeautifulSoup and performed price forecasting for each types of condos based on its facility and location using Random forest regression to suggest base selling price to second-hand condo seller.
- Created an interactive dashboard for helping real estate buyer to find the best price property using Power BI.

ACTIVITIES

ChAMP Engineering 2 (Chulalongkorn alumni mentorship program): Mentee

2019/10 - Present

- Developed career paths and determined what is necessary to do to achieve the life goals

Chula Nakhonnayok academic camp : Instructor

2019/12 - 2020/01

- Guided the career paths and college exam preparation to high school students at Nakhonnayok Witthayakhom School

Seminars and Workshops

2018/04 - 2019/07

- LANDMARK Forum : Personal, philosophy & discipline development seminars
- Techsauce global summit 2019 : Public speaking workshop