Niti Wattanasirichaigoon

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EDUCATION

Illinois Institute of Technology   *Aug 2018 – Dec 2020 (Expected)*
Master's in Data Science, GPA: 3.74   *Chicago, IL, USA*

University of Tsukuba   *Apr 2011 – Mar 2015*
Bachelors of Science – Biology, GPA: 3.35   *Tsukuba, Ibaraki, Japan*

PROJECTS

Complexity Estimation of Deep Learning Models   *May 2020 – Present*
Data Science Practicum Project – CCC Information Services
Python, Tensorflow MirroredStrategy, Keras, pandas, numpy, Chameleon Cloud, TF datasets
- Created a tool for estimating the training time of deep neural networks given its structure, input data shape, and GPU specifications. MAPE = 9.4%
- Currently working on experiments to find causes of overestimation.

Color Scheme Analysis of Popular Illustrations   *June 2020*
Python, Pillow, K-means clustering, PyPI
- Analyzed color usage trends of popular illustrations from the popular art site, *Pixiv*.
- Created a tool that extracts color palettes from an image, trim out relatively less vibrant colors, and identify the color harmonies in it (monochromatic, analogous, complementary etc.).
- Published python package to *PyPI* by the name *'color-harmony'*.

Automatic Image Colorization   *Apr 2020*
Python, Keras, pandas, numpy, MIT Places Dataset
- Trained a convolutional neural network that also implements image classification as global priors to produce more accurate automatic colorization of grayscale images.

Algorithmic Trading – Pairs Trading   *Mar 2020*
Python, pandas, numpy, matplotlib
- Implemented basic Pairs Trading strategy with a running window over 30 assets based on collinearity of asset prices and computed target exit prices based on expected holding time.

MLB Playoffs Prediction   *Oct 2019 – Dec 2019*
R, Linear Regression, Logistic Regression, LDA, Lasso feature selection
- Trained a binary classification model to predict each *MLB* playoff match results using regular season team performance as predictors.
- Using 2001 to 2018 data for training, the model predicts the 2019 playoffs with 71.4% accuracy.

OTHER EXPERIENCE

Throne of Games - Board Game café   *Aug 2016 – Apr 2020*
CO-Founder / Manager   *Bangkok, Thailand*

National Science Museum, Thailand   *Aug 2015 – Jul 2016*
Science Communicator   *Pathum Thani, Thailand*

SCHOLARSHIPS   LANGUAGES   HOBBIES

Monbukagakusho Scholarship   Thai (Native)   **Manga & Illustrations**
The Japanese Government Scholarship (Full Tuition)   English   *5700+ followers on Pixiv*
Apr 2010 – Mar 2015   Japanese