

Ming Ruey(Ray) Chou

(+886) 966525557
✉ imchou239@gmail.com
🌐 MingRuey
Twitter: imchou239
Taipei, Taiwan

SKILLS

Programming Python: Linux - IDE and Virtualenv/Docker, Windows - Anaconda, Java, IDL, Labview

ML TensorFlow, Keras, Scikit-Learn, Pandas, Lightgbm

Visualization Basics of Matplotlib, Seaborn; OriginLab

DB Basics of SQL and MySQL

Language Mandarin: Native; English: Fluent

PROJECTS

Kaggle - iMaterialist Challenge(Fashion) at FGVC5

Top 16% Multi-label classification competition over one million images. I did transfer learning for standard CNNs with Keras, and use GrabCut and spectral saliency detection to segment background/foreground as preprocessing.

Kaggle - Avito Demand Prediction Challenge

Top 27% Predict the demand over one million products on Avito.ru website. After standard missing value handling, one-hot encoding, and data normalization, I tackled the task with iterative process of EDA and GBDT modeling with LightGBM. Using both feature importance given by the model and observation from EDA to improve the model.

Kaggle - Google AI Open Images - Object Detection Track

Top 19% An object detection competition on Open Images Dataset V4. I packed the data into TFRecord format and used TensorFlow object detection API to do transfer learning on Faster-RCNN architecture.

Kaggle - RSNA Pneumonia Detection Challenge

Top 21% Predict the location of Pneumonia on X-ray images. Using TensorFlow, I built Unet and Faster-RCNN from scratch, trained models with Estimator API and applied data augmentation including half-splitting, rotating, and flipping.

T-Brain AI- Taiwan ETF Price Prediction

Use ARIMA to predict the time series of ETF price. Also experient with traditional technical indicators like RSI, stochastic oscillator, %R, Chaikin oscillator CCI .etc as features for a random forest classifier.

EDUCATION

13.09 - 16.07 **M.S. in Physics**, *Department of Physics*, National Taiwan University.

09.09 - 13.07 **B.S. in Physics**, *Department of Physics*, National Taiwan University.

Course Work – Coursera :

- Algorithms 4E, Robert Sedgewick and Kevin Wayne; Princeton
- Machine Learning Foundations, Hsuan-Tien Lin; NTU
- Machine Learning, Andrew Ng; Standford
- Introduction to SQL, Charles Severance; Michigan
- SQL for Data Science, Sadie St. Lawrence; UC Davis

WRITING

M.S. Thesis **Rheometry on Concentrated Suspension of Soft Particles**
(In Mandarin) www.phys.sinica.edu.tw/jctsai/Ray2016/

OTHER EXPERIENCE

18.01 ; 18.07 **Twin Oaks Education**, *Course Design and Project Mentor*, www.twinoaks-edu.com/.

16.09 - 17.08 **Substitutue Services in Education**, *Xinyi Elementary School*, Hualien, Taiwan.