

Ding-Chih Lin

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EDUCATION

National Tsinghua University

Master of Science in Statistics

Sep. 2020 – Present

Hsinchu, Taiwan

National Taipei University

Bachelor of Science in Economics

Sep. 2015 – Jun. 2020

New Taipei, Taiwan

EXPERIENCE

Data Analyst (Summer Internship)

Wistron NeWeb Corporation, Engineer Data System Analysis.

Aug. 2021 – Sep. 2021

Hsinchu, Taiwan

- Found potential factors that cause product anomalies in assemble and test procedure across two stages of manufacturing process
- Constructed the pipeline of streaming and analyzing data to generate consistent quantitative based insight
- Processed multiple tables of structural data from Oracle and Hadoop databases through SQL, Apache Phoenix and Spark (2GB+ per user request)
- Developed a R-and-Shiny based web application with a dashboard to provide insights for other departments

Capstone Project

Legal Aid Foundation

Jan. 2020 – Jul. 2020

Taipei, Taiwan

- Identified significant factors affecting the geographical distribution of legal aid cases
- Improved the Foundation's policy on prioritizing key areas and marked outlier regions, assisted the Foundation finding areas that are in urgent need for legal aid services or resource reallocation
- Utilized Bayesian hierarchical model with spatial structure, modeled by conditional autoregressive model
- Organized tasks for the technical team, comprised of four students, and cross-discipline communication with a researcher, an IT, and a specialist assigned from LAF

Research Assistant

National Taiwan University of Science and Technology, ME.

Nov. 2020 – Dec. 2020

Taipei, Taiwan

- Based on sensor imagery, calculate the designated proportions for various colors and further derive the volume of interest within a confined tubular space
- Implemented with Python and OpenCV
- Built a web application by using Restful API with Flask, Apache HTTP server, and deployed it on AWS EC2
- Automation of modeling procedure for flow in convergent divergent nozzle

SELECTED PROJECTS

Facial Attribute Manipulation | *Python, tensorflow*

- Built Variational Auto-Encoder (VAE) and Deep Feature Consistent VAE (DFC-VAE) for a face generator and facial attribute manipulation

Text analysis for customer support on Twitter | *Python, NLTK, gensim*

- Applied maximum likelihood methods to create smart word clouds for positive, neutral and negative twitters
- Built Latent Dirichlet Allocation model to discovery the topics of each twitter

Rossmann Store Sales Prediction | *R, forecast*

- Utilized time series models to predict the sales of all Rossmann store after 48 days : ARIMA, SARIMA and dynamic regression

TECHNICAL SKILLS

Programming: R, Python, C/C++, Linux

Software & Tools: SQL, Hadoop, Spark, Docker, Git, RESTful API, AWS

Libraries: tensorflow, scikit-learn, Flask, OpenCV, tidyverse ecosystem, caret, Shiny, Selenium, BeautifulSoup