

#### DATA ANALYST . DATA SCIENTIST

4021 Dominion Cove. Austin TX. 78759

□ (512) 420-3825 | ■ melanieihuei@gmail.com | 🏕 melanieihuei.github.io | 🖸 melanieihuei | 🛅 ihuei-ho

Master of Science in Statistics at University of Georgia. Seeking a **data analytics** related position. Experienced in **statistical modeling**, **natural language processing**, and **image processing** with over 5 years experience in R and 2 years experience in Python and PySpark.

#### **Education**

M.S. in Statistics University of Georgia

Athens, GA Aug. 2016 - May 2018

**Courses**: Data Science Practicum in Python and Spark, Data Science, Data Mining, Statistical Programming in R and SAS, Linear Model, Probability Theory, Statistical Inference, Statistical Consultation, Time Series, Sampling Method

B.S. in Statistics National Cheng Kung University

Tainan, Taiwan Sep. 2010 - Jun. 2014

# **Data Analytics Experience**

#### Web Traffic Forecasting of Wikipedia pages %

Athens, GA

Dept. of Statistics and Dept. of Computer Science, University of Georgia

Jan. 2018 - May 2018

- Retooled R time series package itsmr into Python version itsmpy
- Modularized ARIMA and Long Short-term Memory (LSTM) models applied to 145k Wikipedia pages in Python and resulted in 38.89 mean symmetric
  mean absolute percent error

## Microsoft Malware Classification on Apache Spark %

Athens, GA

DEPT. OF COMPUTER SCIENCE, UNIVERSITY OF GEORGIA

Feb. 2018

- · Features mining from .bytes and .asm files and features reduction via inverse document frequency (IDF) value and decision trees
- Applied random forest classifier on Pyspark by submitting jobs to Google Cloud computing machine and resulted in 98.97% accuracy of malware classification

#### Automatic Emotional Detection from Image Data with Support Vector Machine

Athens, GA

DEPT. OF COMPUTER SCIENCE, UNIVERSITY OF GEORGIA

Sep. 2017 - Dec. 2017

- Extracted histogram of oriented gradients feature descriptors of images using OpenCV in Python
- · Optimized support vector machine for 20 minutes process time of 1300 images and resulted in 98.1% testing accuracy

## Genetic Serious Disease Investigation %

Athens, GA

DEPT. OF STATISTICS, UNIVERSITY OF GEORGIA

May. 2017

- Filled missing values of blood tests results through regression trees in R
- Graphed Assumption checks and diagnostics in ggplot2 and established logistic regression model and time series model in R

# Other Work Experience

#### **Graduate Teaching Assistant**

Athens, GA

University of Georgia

Aug. 2017 - May 2018

- · Provided lectures of implementing R in regression models for social datasets in course SOCI6630
- Held several workshops addressing application of R at Department of Sociology

### **Associate Analyst of Supply Chain Management Division**

New Taipei, Taiwan

EVERLIGHT ELECTRONICS Co., LTD.

July 2014 - Aug. 2015

- Assessed and predicted future stock depreciation for monthly skull session and resulted in 15% sales revenues increase and one plant extension in southern Taiwan
- Evaluated potential devaluated products, demonstrated price-reducing trend to sales management division, and prevented 60% possible depreciation

Surveying Analyst Tainan, Taiwan

NATIONAL CHENG KUNG UNIVERSITY

Oct. 2011 - Jan. 2012

- · Assisted investigations with pool surveys of 2012 Taiwan Presidential election and Legislative Election by collaborating with industries
- Submitted reports for improvement of obtaining reliable results and increased survey completion rate by 15%

# **Skills**

**Programming** R, Python

**STAT Models** Generalized Linear Model, Mixed Effect Model, Logistic Regression, ARIMA Model, ANOVA

ML Models Logistic Regression, Support Vector Machine, k-NN, Random Forest Classifier, Constrained NMF, PCA, SVD

Data Science tools NumPy, Pandas, scikit-learn, Scikit-image, NLTK, OpenCV, TensorFlow

**Data Visualization** ggplot2, Matplotlib, Tableau, Html

Other Tools Apache Spark, MySQL, Unix, Git, SAS, Microsoft Excel, Google Computing Engine, LaTeX, R Markdown, Jupyter Notebooks