

I-Huei (Melanie) Ho

DATA ANALYST · DATA SCIENTIST

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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**
- Applied ARIMA models to each page and a Long Short-term Memory (LSTM) model to all 145k pages

Malware Classification on Apache Spark 🔗

Athens, GA

DEPT. OF COMPUTER SCIENCE, UNIVERSITY OF GEORGIA

Feb. 2018

- Extracted file sizes, bytes, segments of machine instructions, and n-grams operation codes from .bytes and .asm files as features and reduced features amount using inverse document frequency (IDF) and random forest classifier
- Applied random forest classifier on Apache Spark to various combination of extracted features and resulted in 98.97% accuracy including features unigram bytes and segments in final model 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

- Detected facial features by histogram of oriented gradients feature descriptors using OpenCV on Python
- Classified emotions by support vector machine and resulted in 98.1% testing accuracy

Genetic Serious Disease Investigation 🔗

Athens, GA

DEPT. OF STATISTICS, UNIVERSITY OF GEORGIA

May. 2017

- Established logistic regression model by full stepwise procedure, several one-way ANOVA, and time series model in R for predicting the probability of having serious genetic disease based on personal blood test and background
- Clarified nebulous variables and utilized CART in filling missing values in blood tests results

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 stock 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

Statistical Models Generalized Linear Model, Mixed Effect Model, Logistic Regression, ARIMA Model, ANOVA

Machine Learning Models Naive Bayes Classifier, Logistic Regression Classifier, Support Vector Machine, Random Forest Classifier

Data Visualization ggplot2, matplotlib, Tableau, Html

Other Tools Apache Spark, MySQL, Unix, Git, SAS, Microsoft Excel, Google Computing Engine, LaTeX