

# YINGCHU (KIMBERLY) LO

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## SUMMARY

A dedicated and detail-oriented scientific software professional driven to achieve results to ensure team success and exceed expectations in developing and optimizing computer applications and systems to support diverse operations and programs. Able to collect, cleanse, integrate and data mine a data base to improve the strategy and find new opportunities for profit.

Knowledgeable about

- Logistic Regression: Able to classify clients from different market segments
- Principal Component Analysis (PCA): Capture the variance in data to predict future demand precisely
- Natural Language Processing (NLP): Transform unstructured text into vectors used for machine learning
- Random Forest: Capable to classify subscribers into those who may or may not churn
- Project Management: Know how to design a plan to monitor project execution
- Supply Chain Inventory Management: Analyze large data sets, and develop a model to predict future demand of product
- Logistics Management: Construct best distribution network to ship products efficiently
- Operations Research: Apply analytical methods to improve performance and make decisions based on facts

## TECHNICAL SKILLS

- Programming languages: R, C, C++, Python, PHP, Java
- Database Technologies: SQL, DynamoDB, SAP, PostgreSQL
- Tools: STATA, Hadoop, MapReduce, Apache Pig, Hive, Spark, Tableau, TensorFlow, pandas, NumPy, SciPy, Scikit-learn, dplyr, ggplot2, Apache Kafka, ETL process, MATLAB, JMP, SAS, SPSS, Net

## EDUCATION

M.S. Analytics, Viterbi School of Engineering, **University of Southern California** Expected 5/2019  
B.S. Industrial Engineering & Management, **National Chiao Tung University** 6/2017

## ACCOMPLISHMENTS

**AT&T Case-Hack Grand-Prize Winner** 1/2018

- Developed real-time Application Programming Interface (API) using Python in 37 hours to make 2+ users watch the same video on DIRECTV synchronously

**Data Engineering on Google Cloud Platform**, a 5-course specialization by Google Cloud on Coursera 12/2019

## PROFESSIONAL EXPERIENCE

LAC + USC Medical Center, Los Angeles, CA 1/2019 – Present

### **Programmer Analyst**

- Analyzed data to find factors resulting effect on patient satisfaction

USC Viterbi School of Engineering, Los Angeles, CA 7/2018 – Present

### **Quantitative R Developer**

- Craft a package for refining Logistic Regression in R
- Created a series of functions to select 20 variables from 100+ variables automatically
- Reduced time consumption by 30% for training model, and reduced 10% of chance for overfitting

Taiwan Semiconductor Manufacturing Company, Taiwan 1/2016 – 12/2016

### **Supply Chain Inventory Management**

- Applied Design of Experiment (DoE) to improve existing replenishment rule
- Saved \$1,025,000 /year in inventory & shortage cost by adjusting parameters of current replenishment rule

Wisecamera Technology Corporation, Taiwan 6/2016 – 8/2016

### **Project Management**

- Supervised a 6-person team in developing Internet of Things (IoT) home products to control utility and security system
- Enhanced and improved existing investing stock system by using stochastic linear programming (SLP) and ARIMA