

# ANGELA (YINGCHU) 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

- Natural Language Processing (NLP): Transform unstructured text into vectors used for machine learning
- Convolutional Neural Network (CNN): Able to analyze visual imagery to automatically tag someone in picture
- Principal Component Analysis (PCA): Capture the variance in data to predict future demand precisely
- 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

## SKILLS

- Programming languages: R, C, C++, Python
- Database Technologies: SQL, DynamoDB, PostgreSQL
- Tools: Hadoop, MapReduce, Pig, Hive, Spark, Tableau, TensorFlow, Keras, pandas, NumPy, Scikit-learn, dplyr, ggplot2, Kafka, ETL process, JMP, SAS, SPSS
- Languages: Mandarin, Japanese

## 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 12/2018

## PROFESSIONAL EXPERIENCE

**Data Analyst** 1/2019 - Present

LAC+USC Medical Center, Los Angeles, CA

- Collaborated with physician and engineers on designing data collection guideline
- Increased 3% of patient satisfaction by discovering factors resulting effect on patient experience

**Quantitative R Developer** 7/2018 - Present

USC Viterbi School of Engineering, Los Angeles, CA

- 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

**Supply Chain Inventory Management** 1/2016 – 12/2016

Taiwan Semiconductor Manufacturing Company, Hsinchu, Taiwan

- 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

**Project Management** 6/2016 – 8/2016

Wisecamera Technology Corporation, Hsinchu, Taiwan

- 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