

# ANDREW MA

808-381-8702 zhengma86@gmail.com 14707 Red Hill Ave, Tustin CA (US Citizen) https://zhengyuanma.us

# Stanford University

B.S., Mathematical and Computational Science, '13-'17 GPA: 3.77 | GRE 166/167/5.5

Peking University, '17-'19 M.S. Yenching Academy Fellowship Program GPA: 3.74

Courses: Data Mining and Recommender Systems, Natural

Language Processing, Computer Vision, Graph Machine Learning, Optimization, Advanced Computational Theory, Statistical Inference, Stochastic Modeling, ANOVA, Data Structures, Computer Systems, Algorithms

#### Skills

# Languages and Frameworks:

Python, Spark, PyTorch, Tensorflow Exposure: C/C++, R, Scala, Web/JayaScript, Java, C#

Tools:

Docker/K8S, SQL

## Data Mining:

NLP (Text Mining, Deep Learning), Statistical ML, Graph Algorithms, RecSys, Optimization, Bandits, LSH

#### Awards

- USA Math Olympiad Qualifier (250 annually nationwide, Four-Time)
- Hawaii State Mathematics Individual Champion (First-ranked among all students in the state, honored by state governor, Five-Time)
- Yenching Academy Fellowship Selective Postgraduate Full Scholarship at Peking University

#### WORK EXPERIENCE

## **Data Scientist**

Grab | Singapore, 2019 Grab is SE Asia's first decacorn, valued at \$14 billion, with 65 million customers in 8 countries

- PySpark model training and ETL for promo targeting platform covering -3M users, using S3, Hive, and Airflow, enabling 30x speedup and 10x scale (100K to 1M users) through optimizations.
- Trained distributed DNN/Tree-based predictors for GMV and Take-Up-Rate (Spark.ml, Tensorflow, KGBoost) for promo targeting that improved revenue by 3% in A/B tests
- Project had buy-in and priority from Sr Mngt, consistent performance allowed scale from 100K to -3M users

Machine Learning Engineer Intern
Alnnovation | Beijing, 2018 (4 mo)
Alnnovation is the Al-Enterprise spinoff of Kai-Fu

 Built recommender systems for an online retail client and a vending machine company using Collaborative Filtering (FFM) and Random Forest/XGBoost tag-based machine learning in Python

## Data Engineer Intern

- Bizvane | Shanghai, 2017 (4 mo)
- Data Validation and Pipelining in **Python, Scala**, and **R** to enable migration to ElasticSearch.

## Software Engineer Intern

Gelber Securities | San Diego, 2016 (4 mo)

 Wrote productionized C# apps to compute collateral and attribute trade profit.

# **PROJECTS**

Projects are interactive and hosted on my site

zhengyuanma.us Co-Authoring With GPT-2

zhengyuanma.us/?#coauthoring\_gpt2

Neural Image Style Transfer

/?#style\_transfer

Neural Machine Translation
/?#nmt

Machine Learning Movie Profit Prediction

/?#movie\_profit\_prediction