



# ANDREW MA

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## Stanford University

B.S., Mathematical and Computational Science, '13-'17  
GPA: 3.77 | GRE 166/167/5.5 | SAT 2320



Peking University  
M.S. Yenching Academy GPA: 3.74

**Courses:** Data Structures, Computer Systems, Analysis of Algorithms, Data Mining and Recommender Systems, Advanced Computational Theory, Graph Machine Learning, Natural Language Processing, Computer Vision, Optimization, Statistical Inference, ANOVA, Stochastic Modeling

## Skills

### Languages and Frameworks:

Python, Spark, PyTorch, SQL

### Tools:

Docker/K8S

### Data Mining:

NLP (Text Embedding, Seq2Seq, Transformer, BERT),

RecSys (Collab Filtering, FM, FFM)

**Exposure:** C/C++, R, Tensorflow

## Awards

- USAMO 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 Full Scholarship at Peking University

## WORK EXPERIENCE



### Data Scientist

**Grab** | Singapore, 2019

Grab is SE Asia's first decacorn with business spanning ride-hailing, food-delivery, and financial services across eight countries

- Wrote **PySpark** ETL pipeline of promo targeting platform for ~3M users in Indonesia, using S3, Hive, and Airflow, enabling **30x speedup and 10x scale** (100K to 1M users) through optimizations
- Trained **DNN** and **Tree-based** Machine Learning Models for GMV and Take-Up-Rate prediction (**Spark.ml, Tensorflow, XGBoost/LightGBM**)



### Recommender Systems Intern

**Alnovation** | Beijing, 2018 (4 mo)

*Alnovation is an AI-Enterprise Company owned by Kai-Fu Lee and Sinovation Ventures*

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

### Data Science Intern

**Bizvane** | Shanghai, 2017 (4 mo)

### Software Engineer Intern

**Gelber Securities** | San Diego, 2016 (4 mo)

## PROJECTS

### Graph Analysis on Chinese Investors

- 2019
- Five years of recent investment data scraped (~60,000 data points) from hundreds of web pages using Python (**Selenium**) into **Redis**. Social network analysis (**centrality, betweenness, clustering**) performed over dataset

### IMBD Profit Prediction

(Link: [tinyurl.com/imdbzma](http://tinyurl.com/imdbzma)) 2019

- Sklearn predictive model pipeline for movie profitability using **Random Forest with LASSO**, deploying self-trained **word2vec** embeddings and **PageRank** network features. Final R<sup>2</sup> of 0.63 predicting non-trivially uncorrelated target (log (profit / budget))