

I am an extremely quick learner (3 standard deviations out) who is excited to turn data into action. With my end to end machine learning application experience, I turn data science into real business values.

Skills

- Data Science: Data ETL and visualization, dimensionality reduction (PCA, auto encoder), statistical/machine learning modeling (Regression, Random Forest, Xgboost, KNN, SVM, Naïve Bayes, clustering), natural language processing (bag of words, Word2Vec), Deep learning (CNN)
- Languages/tools: Python, R, SAS, YAML, SQL (Impala, Teradata), AWS, Shell, Git, SVN, Tableau
- Other: financial analysis (CFA level II candidate)

Relevant Experience

Analytics Lead at Opera Solutions

Mar 2017 - Present

Work as Analytics Lead in multiple projects serving clients in various industries (Telecommunication, Airline, Retail):

- Telecommunication industry campaign optimization:
Leading a global delivery team of 5 analysts supporting the Postpaid use case of a major (big 4) wireless operator:
 - 1) Developed an **event sequence** based churn model which improves churn prediction for campaign targeting (Word2Vec, CNN, Keras).
 - 2) Developed a handset upgrade **uplift model** to improve iPhone campaign targeting/optimization.
 - 3) Led and conducted the annual campaign performance audit effort which brought \$500,000 “success fee” revenue to my employer (**A/B test** design and implementation).
 - 4) Lead the team to deliver 10+ SMS/Email campaigns weekly with **machine learning model optimization** (Logistic Regression, Xgboost).
 - 5) Design data ETL logic and data models, guide the client to set up new data feed (**data ETL**).
 - 6) Lead the team to deliver ad hoc data exploratory analyses (profilings) to support business development.
 - 7) Serve as a communication bridge between the client, business team and analytics team.
- Airline industry customer journey optimization
Served in a major (big 4) airline company project working on the “Customer Journey” use case:
 - 1) Developed a **Bayesian Network** model in Python to help identify misconnection root causes.
 - 2) Conducted ad hoc exploratory analyses to test business hypothesis.
- Retail industry customer journey optimization POC
 - 1) Developed a **customer segmentation** model to define different customer need states (DBSCAN, TSNE).
 - 2) Developed a **CHAID** model to help diagnose the impact of different customer attributes on purchase behavior change.

Freelance Data Analyst at Medscape

Jan 2017 - Mar 2017

Used Python (pandas, numpy, scipy, matplotlib, seaborn, sklearn, statsmodels) to conduct data cleaning, visualization, statistical analysis and create reports with healthcare data; including logistic regression, hypothesis testing, correlation matrix and effect size calculation.

Data Science Student at General Assembly

Aug 2016 - Oct 2016

Studied and Utilized data science theories, techniques and models to design research, collect data, process data and build models to solve real world problems. Highlighted projects include Expedia user behavior prediction, DC Michelin star restaurants prediction, West Nile Virus spread prediction, Credit card default prediction, etc.

Professional Experience

Operation Analyst at Postal Savings Bank of China

Oct 2014 - Mar 2016

Directly assisted the Sector Director in analyzing business data and drafting analysis reports on regional business development within Zhejiang Province.

Senior Analyst at Shenyin & Wanguo Securities

Aug 2011 - Aug 2014

Served as a Senior Analyst at Investment Banking Division on a team responsible for conducting due diligence, industry/market research, and providing financial and legal consulting services to potential securities issuers. Participated in an auto parts manufacturer’s IPO project and a fiber producer’s corporate bond project as a core member. Led two OTC market listing projects.

Education

North Carolina State University

Master’s degree in Economics

Zhejiang University

Bachelor’s degree in Management