Xuefang ZHAO

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Education

Nankai University (NKU) Sep 2016 – Jun 2018

*Master of Engineering in Control Engineering (**Average Score:** 90.26)* *Tianjin, China*

- **A+ Courses:** Frontiers of Control Theory, Linear Systems Theory, Control Engineering, Intelligent Predictive Control, Fuzzy Systems and Control

Qinggong College, North China University of Science and Technology Sep 2011 – Jun 2015

*Bachelor of Engineering in Electrical Engineering and Automation (**Average Score:** 89.2)* *Tangshan, China*

- **A+ Courses:** Advanced Mathematics, Linear Algebra, Probability and Statistics, Signals and Systems, Automatic Control Principle, Complex Function and Integral Transformation, Fundamentals of Digital Electronics, Programmable Controllers, University Physics, Electrical Control Technology, Power System Analysis, Power Electronics Technology, etc

Working Experience

Meitu - A Leading Image Processing Company in China Jun 2019 - Present

Senior Data Mining Engineer, User Portrait Group, Data Intelligence Department (Mentor: Zhao Yang) *Beijing, China*

- Areas: Big Data, Machine Learning, Deep Learning, Data Mining, Data Analysis, Consumer Data Platform.
- Developed, optimized, and maintained labels for the Consumer Data Platform; modeled data, including full-process data processing, data analysis, feature engineering, algorithm model design, effect evaluation, model deployment, and monitoring optimization; supported various business teams, including Financial Risk Control, Brand Marketing, Meitu Membership, and Meitu Design Studio.

Meituan - A Leading Tech-driven Retail Company in China Jun 2018 – May 2019

Business Analyst, User Growth Group, Hotel and Travel Department (Mentors: Juan Yin, Hui Chen) *Beijing, China*

- Areas: User Growth, Business Analytics, Data Mining, Machine Learning, Hotel Label Management Platform.
- Mined, optimized, and automated hotel labels in different scenarios; developed the must-stay list for the Meituan app.

Projects

Meitu User Age Range Prediction | *Python, SQL, Shell, Spark, Scala* Mar 2023 - Present

- **V1:** Established Logistic Regression and Random Forest models to predict the age groups of Meitu users based on users' portrait labels, community consumption behaviors, tool click behaviors, and other features, achieving an initial accuracy of 45% and then implemented a stacking model of LR, RF, and XGBoost, which increased the model accuracy to 50%.
- **V2:** Segmented the words, filtered out special characters and stop words, calculated the TF-IDF value to vectorize the features based on the text information of users in the Meitu user-generated content community, used the chi-square test for feature selection, and established a Spark MLP model to predict the age groups of Meitu users and the model accuracy was 52%.
- **V3:** Established a decision tree model to predict the age groups of Meitu users based on the users' portrait labels, community consumption behaviors, tool click behaviors, and other features, with a model accuracy of 60% and added the users' time segment preference and active date type labels based on the previous features to establish a LightGBM model, with the model accuracy increased from 60% to 66%.

Meitu Commercial Crowd Mining and Expansion | *Python, SQL, Shell* Sep 2020 - Jun 2024

- Leveraged user profiling data to build target audience packages, assisting brand marketing teams in securing advertising contracts and generating revenue in the tens of millions of RMB.
- Deeply explored commercial populations, applied TGI, Jaccard Similarity, Simhash, and Look-alike algorithms to expand the number of commercial populations, and conducted targeted advertising.
- Applied the Large Language Model to build an intelligent marketing label framework and automatically generated commercial population labels.

Meitu Membership System | *Python, SQL, Shell, Spark, Scala* Jan 2022 - Dec 2023

- Developed labels for various Meitu apps based on the membership business logic, including membership status, member payment method, member life cycle, member price sensitivity, member level, member AIPL, etc.

- Established LightGBM models based on different business attributes to develop labels such as potential members, churned members, and repurchase members of different Meitu apps.
- Based on the membership label system constructed above, the Meitu membership business can carry out activities such as member student discounts and obtain millions of RMB in membership income.

Meitu Users Stratification System | *Python, SQL, Shell* Oct 2019 - Apr 2022

- Developed labels for various Meitu apps based on business logic and algorithmic models, including users' life cycle, activity stratification, active date type, time segment preference, and churn probability prediction.
- The users' activity stratification label of the Meitu community was applied to push, and the CTR increased by 4.767%.

Meituan Hotel and Travel Must-stay List | *Python, SQL* Jan 2019 - May 2019

- Set the entry threshold based on the hotels' basic attributes and user-level information and selected higher-quality hotels to enter the listing period; respectively established the city list and national feature list during the entry and listing periods.
- Identified key features using correlation analysis and implemented a hotel rating model based on the Wilson Score Ranking algorithm and hierarchical analysis, selecting hotels for the entry and listing periods according to their ratings.
- The must-stay list was launched on the Meituan app's hotel channels, boosting traffic for listed hotels by 30% and increasing high-end hotels' willingness to collaborate with Meituan.

Meituan Hotel and Travel Scenario Labels | *Python, SQL* Sep 2018 - Apr 2019

- Built models to mine hotel labels based on different scenarios and iterated and optimized labels based on business logic.
- Built an automated hotel labels mining system, including labels' selection, development, launch, optimization, and effect evaluation processes.
- Created a scenario-based label data reporting system, including search function, filter function, and other dimensional reports.
- The visit-to-purchase rate for newly added tags such as "Ancient Town Stroll," "Sea View Room," and "Food Street" increased by an average of 3% compared to the overall market. Optimized tags like "Couple Dating" and "Riverside" experienced a 1% increase in the visit-to-purchase rate, with the "Couple Dating" tag contributing an additional 957 paid room nights per week.

Patent

Method and system for predicting box-office performance of movies based on a neural network algorithm Sep 2016 - Jun 2018

Advisor: Prof. Jianlei Zhang

Awards

Meitu Data Intelligence Department Annual Star (**5 holders among 100+ employees**)	Jan 2022
Nankai University Graduate Scholarship	Jun 2018
Outstanding Graduates of Hebei Province's Universities (**Top 1%**)	May 2015
Tri-merit student honor award of North China University of Science and Technology (**3 times**) (**Top 1%**)	Sep 2011 - Apr 2015
University First Prize Scholarship (**6 times**) (**Top 5%**)	Sep 2011 - Apr 2015
National Scholarship (**1 holder among 400+ students**)	Nov 2012

Mathematics Competition Honors

Special Prize in the National Risk Control and Management Capacity Challenge Competition for Chinese Universities	Sep 2017
Second Prize in the Preliminary Round of the 6th National College Students Mathematics Competition	Nov 2014
First Prize in the Hebei Provincial Undergraduate Mathematics Contest (**twice**) (**Top 5%**)	Oct 2014
Honorable Mention of the 2014 Mathematical Contest In Modeling	Apr 2014
Third Prize of the 2014 Asia Pacific Mathematical Contest In Modeling	Mar 2014
First Prize in the 6th Mathematics Competition of the North China University of Science and Technology	Nov 2012

Technical Skills

Programming Languages: Python, SQL, Scala, Shell, MATLAB, C#, C, HTML, CSS

Tools: PyTorch, Spark, Linux, GitHub, SPSS, Markdown

Skills Certificates: Network Engineer Certification, Microsoft Excel Certification, Advanced Maintenance Electrician Certification