Xuefang ZHAO

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Education

Nankai University (NKU) Sep 2016 – Jun 2018

*Master of Engineering in Control Engineering (**GPA:** 3.81 / 4.00, **Rank:** 1 / 47)* *Tianjin, China*

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

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

*Bachelor of Engineering in Electrical Engineering and Automation (**GPA:** 3.76 / 4.00, **Rank:** 1 / 400+)* *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 (www.meitu.com) Jun 2019 - Present

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

- Areas: Big Data, Machine Learning, Deep Learning, Data Mining, Consumer Data Platform.
- Developed, optimized, and maintained labels for the CDP system; supported various business teams including Financial Risk Control, Brand Marketing, Meitu Membership, and Meitu Design Studio, etc.

Meituan (www.meituan.com) 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 Tag Management Platform.
- Mined, optimized, and automated hotel tags in different scenarios; developed the must-stay list for the Meituan App.

Projects

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

- **V1:** Established Logistic Regression and Random Forest models to predict the age stages of Meitu users based on user 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, Random Forest, 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 Xiuxiu community, used the chi-square test for feature selection, and established a Spark MLP model to predict the age stage of Meitu users and the model accuracy was 52%.
- **V3:** Established a decision tree model to predict the age stage of Meitu users based on the user's portrait label, community consumption behaviors, tool click behaviors, and other features, with a model accuracy of 60% and added the user date type preference and user time segment preference based on the previous features to establish the LightGBM model, with a model accuracy increased from 60% to 66%.

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

- Used user portrait data to help brand marketing teams sign advertising orders, obtaining tens of millions of RMB in revenue.
- Deeply explored commercial populations, applied TGI, Jaccard Similarity, Simhash, and Look-alike algorithms in sequence 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.
- Based on different business attributes, established LightGBM models to predict 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 obtaining millions of RMB in membership income.

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

- Developed labels based on business logic and algorithm models, such as user life cycle, user activity stratification, user date type preference, user time segment preference, and user churn probability prediction for different Meitu apps.
- The user activity stratification label of Xiuxiu community users 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 hotel's 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.
- Found important features based on correlation analysis method and implemented a hotel rating model based on Wilson score ranking algorithm and hierarchical analysis method, selecting hotels in the entry period and the listing period according to the ratings.
- The must-stay list was launched on the hotel channels of the Meituan app, resulting in a significant increase in traffic for the listed hotels. Additionally, the promotion of the list enhanced the willingness of high-end hotels to collaborate with Meituan Hotels.

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

- Established models to mine hotel tags based on different scenarios, and iterated and optimized tags based on business logic.
- Built an automated hotel tag mining system, including tag 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 on basis of neural network algorithms 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, JavaScript

Tools: PyTorch, Spark, Linux, GitHub, SPSS

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