# Qin Wu

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#### SUMMARY

Information System Management graduate student seeks data scientist opportunities, with sufficient project experience in machine learning and data analytics. Solid skills in Python, SQL, Tableau. Have a complete understanding of Hadoop framework.

#### **EDUCATION BACKGROUND**

#### Washington University in St. Louis

Master of Information system management

• GPA: 3.87/4.00

 Major Courses: Data Mining, Optimization, Applied Data Science for Practitioner, Enterprise Data Management

### Sichuan Agricultural University

Ya'an, China

Bachelor of Engineering in Computer Science and Technology

09/2015 - 06/2019

Saint Louis, Missouri

08/2019 - 01/2021

Average Scores: 87.8/100.0

 Major Courses: Data Structures and Algorithms, Principle and Application of Database, Computer Network, Computer Composition Principle, Probability Theory and Mathematical Statistics

#### COMPUTER SKILLS

Proficient in: Python, SQL, Tableau, Linux, MATLAB, C, JAVA

### RESEARCH EXPERIENCE

#### **MINST Handwritten dataset**

10/2019 - 11/2019

- Implement cross-validation method; Divide the dataset into training set and test set.
- Establish encoder-decoder framework for encoding reconstruction; Apply Keras package in Python to deploy the recurrent neural network for this project.
- Customize a vae model. Apply cosine similarity comparison method to compare the similarity of the images.
- Modify the number of dimensions and layers to obtain the performance of the model and generate the best parameters of the model.

#### Regression and classification analysis on UCI wine dataset

03/2020 - 04/2020

- Preprocess dataset by data cleaning, categorical feature transformation, missing value filling and standardization, etc.
- Visually analyze the data to determine the analysis steps and methods.
- Execute linear regression, Lasso regression, and random forest to analyze the 14 chemical information variables of wine, obtain the model to calculate the predicted value; evaluate the model through the average absolute error.
- Implement logistic regression, K-nearest neighbor algorithm and self-built model to learn the training set and evaluate the model through the average absolute error.
- Refine the model by finding the best parameters using grid search (GridSearchCV). The final accuracy rate reached 99.8%.

#### Data visualization and predictive analysis of electronic game sales

10/2020 - 11/2020

- Preprocess dataset by missing value filling and standardization. Execute exploratory data analysis.
- Visualize the data to show the commercial value of the data, such as obtaining the most popular game types in the world, the publisher with the most games in the world and the game platform with the most sales in the world.
- Based on the information of game type, publisher and platform, implementing one-hot coding and establish a linear regression model to predict the sales volume of the game.

### **Leadership Experience**

## Director of Propaganda Dept., Association of SAU Clubs

05/2016 - 06/2017

- Responsible for the new club member recruitment in the 2016 Hundred Regiment Campaign. Recruit nearly 10,000 participants. Design and issue 1,000 brochures for the activity.
- Participate in discussions and decision-making with the instructor and the Bureau of the Social Federation, and responsible for the overall arrangement of departmental work.
- Propose and implement the Wechat Official Account for the Association; Take charge of daily management of the account and gain 2000 follows during one-year's operations.