

December 11, 2018

Fang Qizhi Professor School of Mathematical Sciences Ocean University of China 238 Songlin Rd. Qingdao 266100 P. R. China

Phone: (086)+532-6678-2873 Email: qfang@ouc.edu.cn

Dear admissions officer,

It is my pleasure to recommend Xu Yizhou for the acceptance to your esteemed graduate program in Computing (Artificial Intelligence and Machine Learning). I am a professor and dean at the School of Mathematical Sciences who instructed Ms. Xu in the course of Operational Research Foundation in 2018 spring.

I noticed her because of her oral report in my class. It is important for students to enable the oral presentation in college, which is, however, often difficult for freshmen. After all, the public speaking itself is frightening. To be honest, I don't remember the title of her speech, but the enthusiasm and energy of her stage presence were impressive. She grabbed the attention of her classmates and me in the first place because of the well-made PowerPoint and articulate speech.

I believe her seriousness and intelligence are enough for future graduate studies. I think she has a solid foundation and quick thinking. Moreover, she is good at analyzing problems and conducting in-depth research. For example, in the courses of Operational Research Foundation, I mentioned the application of eigenvectors and eigenvalues. In order to cultivate students' academic research ability, I hoped that some students could further explore this topic. Xu Yizhou and her team put forward their applications, and immediately embarked on the project. A week later, they handed in a paper. The content was divided into two parts: the definition and geometric meaning of

eigenvector and the application of Principal Component Analysis (PCA). The second parts discussed the application of PCA in one-dimensional, two-dimensional and multi-dimensional data. The whole paper was logical and convictive, which reached my expectations. I gave her a high score of 94/100 in the course of Operational Research Foundation, which was the result of her hard work. Also, I found that she had a very strong practical ability, could make full use of the basic knowledge, carried out analysis and calculation in research and practice, and came to a scientific and reasonable conclusion. In future, I believe she will become better.

As for machine learning, I think it is very suitable for her. This is because, machine learning needs both mathematics and computers science. Xu Yizhou had rich experience in computer programming and application. To be more specific, after I checked Ms. Xu's resume, I found she had more than one year of ACM training experience, which could effectively cultivate programming ability. I remember the number of students who have the similar experience in our college can be 2/120 around. What's more, in various projects she was always the main programming developer. It is evident that not only was she enthusiastic about computer programming, she was also good at it. I think it is an inevitable choice for her to apply for master degree in Computing (Artificial Intelligence and Machine Learning).

Xu Yizhou is a lively and kind-hearted student. During his undergraduate period, she actively participated in voluntary activities of school associations, and participated in various professional competitions with outstanding results. Xu Yizhou is an ambitious student. She concentrates on taking every step down-to-earth. I see her persistence and her vision for the future. I believe I am recommending an excellent student to your university who will achieve better grades and grow into an outstanding researcher in the field of Machine Learning.

Yours sincerely,

方奔去

Fang Qizhi