

Dear Hiring Manager,

I would like to express my interest in applying for the position “Data Scientist”. I am currently a master’s student at The Johns Hopkins University and majoring in Biomedical Engineering. I will be graduating in the coming May with Master’s degree. My qualifications could be shown as below:

R, Python, SQL, Big Data: I had a great internship experience at The Johns Hopkins Data Science Lab with developing a project about survival analysis in time-series data. I explored data quality on Hadoop using MapReduce. Also, I developed a script using Python to interact with database with SQL integration and extracted ~1TB subset of data out of the database and performed data cleaning with R. To reduce the dimensionality from the overly large multidimensional data, I implemented variable clusters and applied principle component analysis.

Machine Learning, Performance Analysis: I had another wonderful experience at JHU Carey Business School. Based on the large Yelp user data and Amazon food review data, I explored user metrics including bracket retention, DAU/MAU, ratings etc. and visualized results in Tableau. After the metrics analysis, I performed texts vectorization of user reviews to tokenize words for NLP algorithms. Based on words extracted from user reviews, logistic regression was applied with 0.94 AUC. I improved the overall prediction accuracy by 3% training a random forest model. By the end of the project, I presented my research result to the team and visualized the processed data step by step.

Strong Communication Skills: Another remote internship experience could show my strong communication skills. Due to the location limitation, I was working for Tencent company remotely as a data analyst. The team I reported was located in China and I was based in MD, USA. I had two weekly team meetings to help our PM track the working progress. With the strong communication skills, I could always understand the tasks correctly and deliver my contribution on time with high quality and the project timeline was ahead of the plan thanks to the great teamwork between different locations.

Overall, I am confident to fit the position posted since I find myself perfectly matching with the skills requirement listed with my multiple projects/internship experience. I am also a hard worker, fast learner and tech lover. It would be nice if you could provide an interview opportunity to have me prove the ability I presented above.

Thank you,
Best regards,
Luchao Qi