

Faizan Khalid Mohsin

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September 17, 2016

Dear Professor Lennon Li,

I would like to apply for your practicum The Burden of severe Group A Streptococcus in Ontario, as I believe I will be a great fit for your project. I have some experience with time series as I worked on the SSC 2016 Case Study Competition “*Can Google Flu Trends Predict the Frequency and Results of Tests for Influenza and Other Respiratory Illnesses?*”. I also have some experience with spatial data as I worked with the R packages “leaflet”, “gstat”, “rgdal” and “dismo” to perform spatial analysis for one of my consulting projects. Lastly, I have extensive experience of using R through my different projects, from data cleaning and classical regression to machine learning and performing simulations.

As you can see, I have a lot of experience doing statistical consulting. This experience has given me the ability to learn new statistical techniques quickly and at a deep level in a short period of time. I have also learned how to perform in high pressure situations.

Throughout my past years of study, I have demonstrated an outstanding level of academic achievement and shown particular strength in statistical research, demonstrating extensive analytical, computational and quantitative skills. I have been consistently engaged in conducting long-term and short-term research projects, where I have been able to apply my critical thinking and learn quickly and independently new concepts, techniques and skills. Through my many research presentations, I have also achieved excellent visualization and oral communication skills which can be seen as I won the best undergraduate research presentation award at the Statistical Society of Canada’s annual student conference. As the lead researcher of several research projects, as well as through my many leadership experiences, I have developed the ability to work both independently and in a team.

I am a highly creative individual and through, research, industry workshops and forecasting competitions, I have had the opportunity to apply advanced statistical techniques I have learned and think out of the box to solve real world problems. For example, in the case study competition on “What predicts sustainability of Canadian charities?” which we won, we used a novel clustering method to segment our data. We first used principle component analysis to reduce the extremely high dimensionality of our data and then used the principal components as the input to our k-means clustering to segment the successful Canadian charities into different groups, obtaining a very insightful segmentation of the charities.

These projects have helped improve my critical thinking and given me a lot of experience in research. I am a proactive, innovative and highly motivated student. I would like to thank you for considering my application and I look forward to hearing from you.

Sincerely,

Faizan Khalid Mohsin