|  |
| --- |
| Walter Lai  1854 80th Street Brooklyn, NY 11214 · 347-613-7782  walterlaicollege@gmail.com · <https://wlai0611.github.io/> |
|  |

|  |
| --- |
| Dear \_, My name is Walter Lai, a student in the Master's of Data Science Program at Southern Methodist University. Please consider this letter as my cover letter for the \_ position as posted on Indeed. I am really passionate about dashboards and data visualization and would love to work with your team. Please let me explain how I am a great candidate.  I have created an R Shiny app that identifies the best variables to add to a multiple regression model that predicts the salaries of employees based on demographic features. Action buttons allow users to add and remove variables from the regression model. After each time a user adds or removes a variable the app suggests potential explanatory variables that would improve salary prediction. The app shows partial residual plots for new variables controlling for the current model's variables.  The app: <https://wlai0611.shinyapps.io/multiregshiny/>  I have created an R Shiny app that identifies the best variables to add for a Naive Bayes classifier to classify whether employees will quit their jobs. Action buttons allow users to add and remove variables from a Naive Bayes classifier. After each time a user adds or removes a variable, the app shows the cross validated Sensitivity and Specificity of all other explanatory variables if they were added to the model in a dot plot.  The app: <https://wlai0611.shinyapps.io/bayesshiny/>  I have previously worked as a Data Analyst at Brooklyn College's Cognitive Psychology Lab. We used Python and R extensively for analyses of keyboard typing experiments. I created a Python script that generates random paragraphs of text for a user to practice typing on using pandas, numpy and dictionaries on Spyder. The script is available here:  <https://github.com/wlai0611/letterFrequencyTextGenerator>    I used Firebase to create a NoSQL database to store typing data from a RShiny web app that helps people improve typing speed and accuracy:  <https://walterlai.shinyapps.io/devapp/>  Additionally, I passed Microsoft's Querying SQL Server 2012/2014 Exam with an 800/1000.  I am a Tableau Desktop Certified Associate. I have used Tableau to create a dashboard that identifies under-served markets for a fictional beer company using Level of Detail calculations, set and parameter actions. I have deeply enjoyed connecting to many different data sources and easily exploring relationships. The viz can be found here:  [https://public.tableau.com/profile/walter.lai#!/](https://public.tableau.com/profile/walter.lai%23!/)  I have led a group of 4 other SMU students in Kaggle's "House Prices Advanced Regression Techniques" competition to score in the 18th percentile using only multivariate regression techniques and 15 submissions. We used SAS for our analyses and utilized PROC GLMSELECT's stepwise selection and PROC REG's diagnostic plots to select the best variables and address influential observations for our predictive model. I created a do-loop in SAS to iteratively calculate the Root Mean Square Error for every variable once it was added to the model.  Here is my Kaggle Profile: <https://www.kaggle.com/walterlai>  I would love to join your team! Please email me at walterlaicollege@gmail.com.  Walter Lai |