

Assignment Rubric

Spec Category	Spec Details
Formatting	<ul style="list-style-type: none"> Repository – A github repo (and cloud storage folder if necessary) containing all materials <ul style="list-style-type: none"> Submit a link to the repo Everything is contained in the repo or linked to it if appropriate Contents <ul style="list-style-type: none"> Email draft Model results Various Materials (data, code, articles, etc.) Use pdf format when possible For code and data products use the appropriate format for whatever it is Email draft – 1 page in pdf format Model results – 1 or 2 slides in pdf format including the results of your model and whether or not your hypothesis was correct Materials – Files as appropriate
Draft Email	<ul style="list-style-type: none"> Goal: This email should directly address the appropriate person in charge of the MillionTreesNYC initiative. Convince them that the initiative should focus more on low-income, minority communities if you believe that to be useful, or convince them of any other finding that you believe to be appropriate. Make sure your findings included in the email are relevant to tree population and what you believe should be next steps to improve this initiative. The first line of the email should be a formal address to the person intended (Dear Mr./Mrs./etc.) Formally introduce yourself as a student at UVA and give a brief introduction to the reasoning of the email Some references to your sources (which can include the sources already provided in the repo for this assignment) should be made to give the receiver context of the problem Your model results should be referenced if it provides appropriate context to your views on tree density in NYC One page maximum PDF format
Model & Results	<ul style="list-style-type: none"> Goal: Allow anyone who is curious about your findings to be well-informed after viewing a brief, high-level overview of your model results Create a decision tree model in R using the caret package to produce the results

	<ul style="list-style-type: none"> • Use ROC or Accuracy as an evaluation metric to measure the success of the model • Find the variable importance based on Gini Index using the code provided • State whether or not the model results prove your initial hypothesis about whether there is a disparity in tree density of lower-income communities • Provide a brief sentence of next steps that you would take to improve the model • The goal is about 1-2 slides • PDF format
Additional Resources	<ul style="list-style-type: none"> • Goal: Include any additional materials necessary for the email receiver or other interested parties, like other students • Place as many materials in the repo as possible

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