Current Knowledge Statement Written By

Statistical Modeling and Regression (W23)

Sayed Muhammad Saifuddin

At current stage of this course, I get to know about several topics such as, Multiple Linear Regression, Estimating the Regression Coefficients, Testing the Hypothesis regarding the predictors whether they are useful to predict the response or not, Bring Back the Bodies from DF etc.

I was aware of Multiple Linear Regression from my very first semester when I took STA 610. Therefore, when I was reading this topic I felt like I am pretty proficient about the process. I already know about the scenario when to perform simple linear regression and when to perform multiple linear regression.

For this topic, I have to still aware of the type of variables like qualitative or quantitative. For instance, you have to use quantitative variables as predictor for simple linear regression but you can use both quantitative and qualitative variables for multiple linear regression.

Considering all the facts, as I was familiar with this topic, I believe there is nothing unaware from this topic.

For estimating the regression coefficients, my feeling was similar to the feelings for the topic named "Multiple Linear Regression". I did this estimation in my very first semester when I had to find the equation to predict the response variable using the predictors. So, I define myself as proficient of this step.

Finding the coefficients was always interesting and easy to me. While estimating the coefficients, I just must aware of the coefficients of predictors. And then putting those estimations on the equation is very easy.

I found nothing unaware from this topic as I already know about this process. I feel like it's the easiest step of linear regression.

Another topic was answering some important questions regarding the multiple linear regression model. I did this kind of hypothesis testing in my very first semester as a student of STA 610. Hence, I am quite proficient at testing hypothesis and answering the questions regarding the predictors whether they are useful to predict the response variable or not.

For answering the questions, I need to aware of the p-value to test the significance of the model. Based on the significance of the model, we can decide which predictors are useful and which are not to predict the response.

My feelings regarding the unawareness of anything from this topic are similar to the previous topics. I found nothing unaware from this topic as usual because I am quite familiar with this from earlier.

The last topic was Bring Back the Bodies from DF. I admit that I am not that proficient with this topic. I think I have so many scopes to learn about new strategies like this one which can add another layer to my expertise.

I was aware of the concept of bias in individuals, in datasets, or in algorithms is strong enough for equity and justice. But after reading this, I found that it's not strong enough concept in which to anchor ideas about equity and justice.

I was also unaware of the concept of Bias that it is not a problem that can be fixed after the fact. Instead, we must look to understand and design systems that address oppression at the structural level.