Assignment 5 Step 5 Fairness Metric Graph tip #564

Colton Moler
3 months ago in **Assignments – A5 Fairness & Bias**

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❤ 31

Assignment 5 part 5 has you recreating the graphs used in the AI fairness 360 tool. Rather than going through the effort of creating the same formatting yourself you can use their tool to plot your data that you got from the previous step.

In the console enter "render_results" to get access to the rendering function

```
> render_results
<· ƒ render_results(data) {
            var ordering = ['Statistical Parity Difference',
    'Equal Opportunity Difference', 'Average Odds Difference',
    'Disparate Impact', 'Theil Index'];
            console.…

>
```

If you click in you can add a break point to line 208 before the data is rendered

```
                              }
204                      else {
205                          clearInterval(int_timer)
206                          int_complete = true
207                          if (int_data) {
208                              ▶document. ▷getElementById('
209                              render_results(int_data)
210                          }
211                          else
212                              document.getElementById('int
213                      }
214              }
```

You can then enter the value for the metric into the console while the break point is hit.

int_data.results[0].metrics["metric you want, play around with numbers to find which one"].original = your result

After setting the value let the page finish loading and youll have a nicely formatted graph printed out for you

H   **Haoran Sun** 1mth

Hello Colton, which page should we open before entering the developer tool console? In the AI 360 demo page, there are three steps.

♡   Reply   ⋯

Shalini Mishra 1mth

Life saver!!! Thanks much!

♡   Reply   ⋯

S   **Sarnab Podder** 1mth

Life Saver!

♡   Reply   ⋯

K   **Karthik Ramesh** 2mth

How do I upload my dataset (Taiwan dataset) for it to process? Seems like it only has German

♡   Reply   ⋯

　　Y   **Yezhong Zhang** 1mth

　　You don't have to upload the dataset. The idea here is to force a number, and use the frontend code to display it.

　　♡   Reply   ⋯

　　　　K   **Karthik Ramesh** 1mth

　　　　Right, but this is showing the graphs for the German dataset, which is useless if you picked the Taiwan dataset. I dont understand how this is helpful for people who picked the Taiwan dataset.

　　　　♡ 2   Reply   ⋯

　　　　　　Saurabh Rai 1mth
　　　　　　↩ Replying to Karthik Ramesh

　　　　　　Yeah, I have the same question.

　　　　　　♡   Reply   ⋯

Y   **Yuanzhu Li** 2mth

Hi Colton, how do you get into the console?

♡   Reply   ⋯

Michael Litwack 2mth

Thank you!!

♡   Reply   ⋯

　　Y   **Yuanzhu Li** 2mth

　　Hi Michael, did you figure out how to get into the console mentioned above?

　　♡   Reply   ⋯

　　　　Michael Litwack 2mth

　　　　Yes, in Chrome, hit the f12 button on your keyboard. That should get you into the console.

　　　　♡ 1   Reply   ⋯

　　　　Y   **Yuanzhu Li** 2mth
　　　　↩ Replying to Michael Litwack

　　　　Thanks, Michael. I got an error of "undefined". Here is a screenshot. Not sure if I did it correctly. I entered "int_data.results[0].metrics["Disparate Impact"].original = 1.2" at the breakpoint. Did I get the

input correct?

```
         Elements   Console   Sources   Network   Performance   Memory   Application   Security   Lighthouse   Recorder ⬛   Performance insights ⬛          ⊗ 15  ▣ 2   ✿   ⋮
   ▣  ⊘  top ▾  ◉   Filter                                                                                  Default levels ▾  2 Issues: ▣ 2   2 hidden
      Current url-->  aif360.mybluemix.net/check                                                                                              survey.js:112
      Matched url-->  aif360.mybluemix.net/check                                                                                              survey.js:113
      Current url-->  aif360.mybluemix.net/check                                                                                              survey.js:118
      Matched url-->  aif360.mybluemix.net/check                                                                                              survey.js:118
   >  int_data.results[0].metrics["Disparate Impact"].original = 1.2
   ⊗ ▶Uncaught TypeError: Cannot set properties of undefined (setting 'original')                                                               VM26294:1
         at eval (eval at int_tick (check:84:21), <anonymous>:1:58)
         at int_tick (check:208:21)
```

♡ Reply ···

Michael Litwack 2mth
↩ Replying to Yuanzhu Li

It would be a numeric number that represented the metric type

int_data.results[0].metrics['number'].original=[your value]

0 is Statistical Parity

1 is Disparate Impact

2 is Equal Opportunity

etc...

So...

int_data.results[0].metrics['2'].original=.01

would give me an equal opportunity metric that reflected a value of .01

♡ 6   Reply ···

Yuanzhu Li 2mth
↩ Replying to Michael Litwack

Thank you so much! I finally got it.

♡ 2   Reply ···

Haoran Sun 1mth
↩ Replying to Yuanzhu Li

Li, do you know which file should be chosen after opening the console?

♡ Reply ···

Yuanzhu Li 4w
↩ Replying to Yuanzhu Li

There is no file to choose. Just input your data when the code executes to the breaking point, which is line 208 in the "Sources" tab.

♡ Reply ···

Srikanth Tumati 2mth

This helped a ton. Thanks for the tip!

♡ Reply ···

Clayton Francis 2mth

What "console" are you referring to? Jupyter notebook after importing package?

♡ Reply ···

 ⌐ **Srikanth Tumati** 2mth

This would be the browser console. You can use the AI Fairness 360 web demo and follow Colton's instructions as detailed above. This generates the graphs with your provided values.

♡ 3   Reply   ⋯