

CSE 416: Introduction to Machine Learning  
Assignment #5  
Instructor: Pemi Nguyen  
due: Friday, May 6, 2022, 11:59 pm.

In the lectures for week 5, we have discussed different types of biases that can exist in a machine learning pipeline. Choose one example from lectures or from external sources, and elaborate on it. You should discuss the following aspects in an essay, each in **a separate paragraph**:

1. Give an introduction about that bias? Where does it originate from? At what stage of the ML pipeline does it take place?
2. What is the impact of machine learning model with that bias in our lives?
3. What are possible ways to mitigate that bias (making better datasets, creating laws, collaborating among researchers, etc.)?
4. Describe your background and how understanding and combating biases is important for you as a machine learning practitioner. What are your plans to explore machine learning biases after the class?

Here are the requirements for this essay:

- Only **individual** submission will be accepted.
- Provide at least one external reference source (you can just provide links without a formal citation). Even though not a requirement, we strongly encourage you seek reputable newspapers or peer-reviewed research papers.
- Your essay should be at least 400 words and should be your original work.

Because this is not an English class, there is not a strict requirement on grammar or writing style. As long as you show clear effort in your writing, you will be eligible for full credit.