CS 260: Machine Learning	Spring 2020

Homework 1

Hand Out: March.30   *Due: April.15*

- Feel free to talk to other students in the class when doing the homework. You should, however, write down your solution yourself. You also must indicate on each homework with whom you collaborated and cite any other sources you use including Internet sites.

- You will write your solution in LaTeX and submit the **pdf file through Gradescope**. You also need to submit the **zipped LaTeX files to CCLE**. We will grade your homework based on the final version of the pdf file submitted to Gradescope. We will not grade the zipped Latex files on CCLE. However, failure to submitting your LaTax files to CCLE will incur 2 points penalty out of 100 points.

- The homework (both pdf and zipped Latex source files) is due at **1:59 PM before the class**.

The following questions are from *Understanding Machine Learning: From Theory to Algorithms* by Shai Shalev-Shwartz and Shai Ben-David. It can be found here http://www.cs.huji.ac.il/ shais/UnderstandingMachineLearning/ by courtesy of the authors.

1. (10 Points) Exercise **2.2**

2. (10 Points) Exercise **2.3**

3. (10 Points) Exercise **3.1**

4. (10 Points) Exercise **3.2**

5. (10 Points) Exercise **3.3**

6. (10 Points) Exercise **3.4**

7. (10 Points) Exercise **3.5**

8. (10 Points) Exercise **3.6**

9. (10 Points) Exercise **4.1**

10. (10 Points) Exercise **4.2**