EE 519: Deep Learning Theory & Fundamentals	Spring 2023

Homework 0
Due: April 9, 2023, 11:59PM PT

Student Name: *Instructor Name: John Lipor*

Problem 1   (0 pts)

Create a gradescope account on `https://gradescope.com`. Use course entry code **V5YEBZ** and use your PDX email and PDX Student ID and your given name and family name. Turning this assignment in via gradescope will be confirmation that you have completed this problem.

Be sure to follow the instructions given here and link all problems to get credit.

Problem 2   (0 pts)

Join the course slack channel following the link here and introduce yourself in the `social` channel. Please state: (1) your name, (2) what you hope to gain from this class, and (3) a song or album you listen to while working. You must use your PDX email.

Problem 3   (3 pts each)

Read the preface, introduction, Ch. 1, and Ch. 2 of the D2L book. For this course, when asked to "read" a given section, the expectation is that you digest both the material and code to the degree you are able on your own. We will spend lecture time going over topics that are sticking points for students. Once you've read these sections, answer the following.

(a) In §3.2.2[1], what does `self(*batch[:-1])` do? Describe both from a programming perspective and from an overall machine learning perspective.

(b) In §3.3, how would one output all batches of a data loader in sequence?

(c) In §3.4.4. what do the `self.model.train()` and `self.model.eval()` commands do?

(d) What is the purpose of the `torch.no_grad()` command in §3.4.4.?

(e) Post one question about code you don't understand to the `lecture-questions` channel.

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[1]The § symbol means *section.*