

# CS 639: Deep Learning for Computer Vision, Spring 2025

## Problem Set 0

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**Due: Tuesday, February 4<sup>th</sup>, 11:59 PM**

### Instructions

1. Download the zipped assignment file from Canvas.
2. Once you unzip the downloaded content, please upload the folder to your Google Drive. Then, open each \*.ipynb notebook file with Google Colab by right-clicking the \*.ipynb file. No installation or setup is required. For more information, please see this tutorial on [using Colab](#).
3. Next, we recommend editing your \*.py file on Google Colab, set the ipython notebook and the code side by side. Work through the notebook, executing cells and implementing the codes in the \*.py file as indicated. You can save your work, both \*.ipynb and \*.py, in Google Drive (click “File” -> “Save”) and resume later if you don’t want to complete it all at once.
4. While working on the assignment, keep the following in mind:
  - The notebook and the python file have clearly marked blocks where you are expected to write code. **Do not write or modify any code outside of these blocks.**
  - **Do not add or delete cells from the notebook.** You may add new cells to perform scratch computations, but you should delete them before submitting your work.
  - **Run all cells, and do not clear out the outputs, before submitting.** You will only get credit for code that has been run.
5. Once you have completed a notebook, download the completed uniqueid\_PS0.zip file, which is generated from your last cell of the pytorch101.ipynb file. Submit this to Canvas. Note that only one person from the group will need to do this.
6. **You may complete the assignment individually or with a partner (i.e., maximum group of 2 people). If you worked with a partner, provide the name of your partner in the \*.ipynb file. We will be using MOSS/Turnitin to check instances of plagiarism/cheating.**
7. **Double check your submission (in particular, that all outputs are printed in the pdfs rendered from the notebook in the zip file) before submitting! We will NOT regrade your assignment because of mistakes due to not double checking your work.**

The goal of this assignment is for you to learn how to use [PyTorch](#) on [Google Colab](#) environment, so that you

- Develop proficiency with PyTorch tensors.
- Gain experience using notebooks on Google Colab.

The notebook `pytorch101.ipynb` will walk you through the basics of working with tensors in PyTorch. You are required to write code on `pytorch101.py`.<sup>1</sup>

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<sup>1</sup> This assignment is adapted from the Python and numpy tutorials from Stanford CS 231n and CS228.