GEORGIA INSTITUTE OF TECHNOLOGY
SCHOOL of ELECTRICAL and COMPUTER ENGINEERING

ECE 6254 Fall 2022
Project #3

Assigned: 11 Oct
Due Date: 20 Oct

Please contact the TAs for clarification on the instructions in the assignments.

Gaussian Mixture Models Trained with EM

1. Just as with Project #1, set up an environment for running Python and Jupyter notebooks:
   - Become familiar with the PACE Instructional Cluster Environment COC-ICE `https://docs.pace.gatech.edu/training/img/ICE_orientation_fall2021.pdf.pdf`
   - VPN into Georgia Tech (see Slide 7 of the ICE Orientation slides above) `https://faq.oit.gatech.edu/content/how-do-i-get-started-campus-vpn/`
   - Follow these steps for a general setup for your Project assignments this semester
     (a) ssh <gt-userID>@coc-ice.pace.gatech.edu (see Slide 7 of the ICE Orientation slides)
     (b) module load anaconda3/2020.11
     (c) **Do not** do the following if you completed Project #1:
       – conda create --name ece6254 python=3.8
     (d) conda activate ece6254
     (e) **Do not** do the following if you completed Project #1:
       – conda install -c anaconda jupyter
       – conda install jupyterlab
       – conda install -c anaconda scikit-learn
       – pip install turicreate
       – conda install -c conda-forge matplotlib
   - For Project03, do the following:
     (a) cp /storage/home/hcocice1/shared-classes/materials/ece6254/Project03.tar.gz .
     (b) tar -xvf Project03.tar.gz
     (c) cd Project03
     (d) run the jupyter notebook (just as you did for Project01). For me with a wired connection on campus or VPN from home, this works:
       – jupyter notebook
       – Follow link (ctrl+click http://localhost:8888...)
     (e) After successfully bringing up the jupyter notebook (from your browser) click on gmm.ipynb
2. Complete the Jupyter notebook by adding your code where you see # YOUR CODE HERE and answering the questions in the notebook.
3. Check Piazza for instructions on how to submit your completed file 'gmm.ipynb'