CMPE258
Team Project on Deep Learning
HL

1. Design and implement a team project based on each 4-person team. The project requirements are listed in details below. Note this project counts total 10 points. This project is due at the end of the semester and it requires a team presentation at the last week of the semester (see requirements below).

2. The technical requirements of the projects:
(2.1) Design and implement your team project which has to utilize deep CNN (Convolutional Neural Network), not limited to a particular DCNN, you may use Yolact, Yolo, GAN, Mask RCNN, LSTM or advanced version of MNIST, or any other DCNN architecture of your choice;
(2.2) Computer Vision algorithms for preprocessing may be needed in your design;
(2.3) Annotation and Training are required in addition to just running the github code;
(2.4) Integration of ChatGPT (3.5) is required in the project design.

3. One page project executive summary:
(3.1) Create one page executive summary of your project, with the following information
a. Title of the Project
b. List of each team members: First Name, Last Name, SID, Email Address, and Affiliation (such as Computer Engineering, Software Engineering, MS AI);
c. Team coordinator: Identify the team coordinator;
d. Abstract (up to one page):
Describe
(i) the objectives of the project ;
(ii) the technical challenges;
(iii) the methodology employed (such as Using Mask RCNN or Yolo4, using mathematical formulation, utilizing TensorFlow, Pytorch … etc.)
(iv) the software tools and hardware platform;
(v) results and deliverable;
(vi) Experience gained and/or lessons learned.
e. table with list of the work contributed by each team member

Team member 1. First, Last Name	Responsibility of the work	Contributions, in the areas of (1) Any coding and the % of the entire project; (2) Testing, Verification; (3) PPT; (4) Executive summary; (5) coordinator; (6) others
Team member 2. First, Last Name	Responsibility of the work	Contributions, in the areas of (1) Any coding and the % of the entire project; (2) Testing, Verification; (3) PPT; (4) Executive summary; (5) coordinator; (6) others
Team member 3. First, Last Name	Responsibility of the work	Contributions, in the areas of (1) Any coding and the % of the entire project; (2) Testing, Verification; (3) PPT; (4) Executive summary; (5) coordinator; (6) others
Team member 4. First, Last Name	Responsibility of the work	Contributions, in the areas of (1) Any coding and the % of the entire project; (2)

		Testing, Verification; (3) PPT; (4) Executive summary; (5) coordinator; (6) others

(3.2) Create readme document for your project.

4. Ten minutes presentation and program demo:
(4.1) PPT (up to 5-7 slides) for 5-7 minutes presentation;
(4.2) Demo (1 pt), 1 minute;
(4.3) Code walk-through for 1-2 minutes;
(4.4) Q&A, 1 minute.

5. Save up to 20 ~ 50 seconds demo video into a file for submission.

6. Submit (Rubrics and grading policy):
a. Executive Summary (1 pt);
b. PPT (3 pts);
c. Your saved video clip (1 pt);
d. The program package, source code and all relevant files and folders, (3 pts);
e. A readme file. Be sure detailed adequate information is provided for testing and verification purpose (2 pts).

7. Put all the above files into one file and zip it.

8. Use the following file naming convention for your zip file:
firstNamePerson1_firstNamePerson2_FirstNamePerson3_FirstNamePerson4_CoordinatorSID(last-4-digits)_cmpe258_team.zip.
Submit it to the class canvas.

(END)