

## **EE258 – PROJECT II      FALL 2018**

**DEADLINE FOR INITIAL RESULTS: DEC 10<sup>th</sup>**

**DEADLINE FOR REPORT/CODE SUBMISSION on CANVAS: DEC 16<sup>th</sup>**

PLEASE SIGN-UP FOR THE PROJECT ASAP (Deadline Nov 19)

EACH COMPETITION PROJECT HAS A CAPACITY OF 13 students (6 groups if each group has two students)

### **Here are possible options for project-II:**

PROJECT II 1. Two Sigma: Using News to Predict Stock Movements (Kaggle)

PROJECT II 2. Human Protein Atlas Image Classification (Kaggle)

PROJECT II 3. Quora Insincere Questions Classification (Kaggle)

PROJECT II 4. Predict Future Sales (Kaggle)

PROJECT II 5. PUBG Finish Placement Prediction (Kaggle)

PROJECT II 6. Replicate the results of a paper in applications of deeplearning (needs to be approved by the instructor by Nov 19<sup>th</sup> – Provide the paper and data source )

### **Below are more details:**

#### **A. KAGGLE COMPETITIONS (available at <https://www.kaggle.com->Competitions>):**

1. Enter the competition with a team name (EE258\_F18\_xxxx) where replace xxxx with your choice of team name.
2. Teams should have at most 2 students
3. Implement a **deep learning algorithm (MLP, CNN, RNN, etc)** to solve the problem given in the selected competition
4. Work on improving your deep learning model using techniques such as regularization, dropout, normalization etc.
5. Prepare 5-10 minute presentation of your initial results to be presented on Dec 10<sup>th</sup> during lecture.
6. Prepare a report explaining
  - Methodology
  - Data
  - Simulations
  - Results
  - Your kaggle performance
7. Submit your code and report on Canvas by Dec 16<sup>th</sup>. Each student should prepare their own report even if they work in a team.
8. Performance of your Kaggle submissions will be part of your grade

B. REPLICATE THE RESULTS OF A PAPER:

1. The paper and data should be approved by the advisor – **deadline Nov 19th**
2. Prepare 5-10 minute presentation of your initial results to be presented on Dec 10<sup>th</sup> during lecture.
3. Prepare a report explaining
  - Methodology
  - Data
  - Simulations
  - Results
4. Submit your code and report on Canvas by Dec 16<sup>th</sup>. Each student should prepare their own report even if they work in a team.