

EE258 – PROJECT II (Updated)

FALL 2017

DEADLINE FOR INITIAL RESULTS: DEC 5th

DEADLINE FOR REPORT/CODE SUBMISSION on CANVAS: DEC 16th

PLEASE SIGN-UP FOR THE PROJECT ASAP (Deadline .Nov 21)

EACH COMPETITION PROJECT HAS A CAPACITY OF 10 students (~5 groups if each group has two students)

Here are possible options for project-II:

PROJECT II 1. Dog Breed Identification (Kaggle)

PROJECT II 2. Spooky Author Identification (Kaggle)

PROJECT II 3. Tensorflow Speech Recognition Challenge (Kaggle)

PROJECT II 4. Housing Prices: Advanced Regression Techniques (Kaggle)

PROJECT II 5. Titanic: Machine Learning from Disaster (Kaggle)

PROJECT II 6. Statoil/C-Core Iceberg Classifier Challenge (Kaggle)

PROJECT II 7. Cdiscount's Image Classification Challenge (Kaggle)

PROJECT II 8. Replicate the results of a paper in applications of deeplearning (needs to be approved by the instructor by Nov 21st – 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 provided by the instructor.
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 minute presentation of your initial results to be presented on Dec 5th during lecture.
6. Prepare a report explaining
 - Methodology
 - Data
 - Simulations
 - Results
 - Your kaggle performance
7. Submit your code and report on Canvas by Dec 16th. 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 21st**
2. Prepare 5 minute presentation of your initial results to be presented on Dec 5th during lecture.
3. Prepare a report explaining
 - Methodology
 - Data
 - Simulations
 - Results
4. Submit your code and report on Canvas by Dec 16th. Each student should prepare their own report even if they work in a team.