

Capstone Overview

Objective:

- To undertake a multi-faceted project that demonstrates your understanding and mastery of the key conceptual and technological aspects of Deep Learning.
- To develop an understanding of how challenging human-level problems can be approached and solved using a combination of tools and techniques.
- To understand current scenarios in deep learning, understand the practicalities and the trade-offs that need to be made when solving a problem in real life.

Milestones:

This project has 2 milestones. You get 3 weeks for completing each milestone. The 1st milestone should be submitted as part of the interim report.

1st Milestone:

1. Problem interpretation
 - Understand the data
 - Make an abstract or an overview based on your approach
 - Break the problem into smaller tasks
 - Discuss among your teammates and share responsibilities
2. Data analysis and preprocessing: Visual displays are powerful when used well, so think carefully about the information the display.
 - Include any insightful visualization
 - Share and explain particularly meaningful features, interactions or summary of data
 - Display examples to input in your model
 - Explain changes to be incorporated into data so that it becomes ready for the model
3. Modeling
 - What kind of neural network you have used and why?
 - What progress you have made towards your intended solution?

2nd Milestone

4. Model evaluation
 - Describe how you will proceed with the analysis

- Compare different models and choose which model to use
- Do hyper-parameter tuning of your model
- How will you build on your initial analysis to increase the accuracy of your model?

5. Presentation and Report

- You should start preparing the final report at least 2 weeks prior to the project completion date.
- Teams should send a draft Last of the project before the last session to the mentor and get the necessary inputs for submission.
- The expectations for the final report will be included in your Capstone course page.