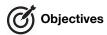
Module 6: Machine Learning Pipeline



In Module 6 we initially describe the tasks of the Machine Learning Pipeline. Then we focus on the importance of feature extraction. We describe the tools used to build a train an ML model. We then explain the building block and mechanism behind building this activity. Finally, we perform feature extraction and build and train a machine learning model on data being used in the previous modules.



Upon completion of this module, students will be able to:

- 1. Define the tasks of the Machine Learning Pipeline
- 2. Describe the Machine Learning Process
- 3. Define the process of feature extraction
- 4. Identify the importance of feature extraction
- 5. Explain the mechanism of building and training an ML model
- 6. Synthesize solutions on ML pipeline focusing on feature extraction and ML model training



Readings

No readings



Watch (30 minutes)

• <u>Lecture 6 Video (https://canvas.vt.edu/media_objects_iframe/m-6dF7MPe4WtLuGhopessFmX5MwJKNAjQ6?type=video?type=video)</u>

- Lecture 6 Slides (https://canvas.vt.edu/courses/176740/files/28995313?wrap=1)
- A+ Assignment (Lab and Homework) (1 hour)
- Assignment 3 (https://canvas.vt.edu/courses/176740/assignments/1816312)



Project Milestone

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-roject Milestone (https://canvas.vt.edu/courses/176740/assignments/1816316)



The recording of the optional synchronous ZOOM session for this lecture will be linked here.

