

Machine Learning Programming

Fall 2018-2019 Semester

Introduction

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ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Teaching Assistants



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Course Content:

- Pure Programming Course
- Content follows Applied Machine Learning course (Friday 9am-1pm ELA1)

Prerequisites:

- Programming in matlab **R2018a (already installed on the computers)**
- Basics in Machine Learning:
 - Principal Component Analysis (PCA)
 - K-nearest neighbour (KNN)
 - K-means
 - Gaussian Mixture Model (GMM)
 - Applications of GMM (Clustering, Classification, Regression)

Grading scheme:

- 5 graded assignments (see class schedule)
- % of grade distribution over the assignments:

Assignment	Grade Percentage
Principal Component Analysis (PCA)	10
K-Nearest Neighbors (K-NN)	20
K-Means	20
GMM	30
GMM Applications	20

- 100% grade if code runs and outputs what is expected (see assignment instructions). Code must run under **matlab R2018a**. If the code fails to run, the assignment will be verified manually and grading will be on a case by case basis depending on the amount of failure.
- Late submissions will be penalized. 1 pt removed for each day late. A day late starts 1 hour after submission.

We use Virtual Machines (VM) to all have the same working environment.

To connect in the rooms:

- Each computers have VMware installed
- Log in to STI-WINDOWS 10 with your credentials

To connect from your computer:

- Go to <https://vdi.epfl.ch/>
- Click on install VMware Horizon client and download the client for your distribution
- Start the client and click on New Server
- Enter https://vdi.epfl.ch as Connection Server and click on Connect
- Use your your credentials and log in to STI-WINDOWS 10

 **Do not save anything outside of the Documents folders! It will be destroyed after you close the VM!**