Université Polytechnique HAUTS-DE-FRANCE

Machine learning for embedded systems

Composante
INSA Hauts-de-France

Présentation

Description

Course :
1. Introduction to machine learning
2. Features extract techniques
3. Survey of existing machine learning algorithms (CNN, fast CNN, deep learning, ...)
4. Supervised and non supervised intelligent systems.
5. Deep neural networks : training and implementation.
6. Implementation constraints of machine learning on embedded systems
7. Environment Perception for transportation systems: Location and recognition of obstacles by radar/Segmentation and recognition of obstacles by camera
8. Medical imaging
9. Collaboration between Radar Detection and Image Based on Deep Learning

TD : Design of intelligent systems for industrial problems.
TP :
Implementation and training of systems designed in TD using Tensorflow
Implementation of trained applications on an embedded system.

Infos pratiques

Lieu(x)

CAMPUS MONT HOUY - VALENCIENNES