

SpeechPizza

Friday, 27 September 2024

12:00 - 13:00, D011

lcis.grenoble-inp.fr

Andra Baltoiu andra.baltoiu@upb.ro

(Assistent Prof. Univ. Politehnica Bucharest, Romania)

Title: Two surprisingly simple and effective methods for anomaly detection

Abstract: The presentation will review the ways in which we can look at data in order to identify unwanted, suspicious or unusual samples. Then, we will discuss two very simple approaches that have remarkably good results: Isolation Forest and Local Outlier Factor.

Pavel Čelovský pavel.celovsky@vsb.cz

(one month visiting PhD candidate from Technical University Ostrava, Czech Republic, working with I. Prodan)

Title: Model Predictive Control for Active Vibration Control

Abstract: My dissertation thesis is aimed to implement of MPC on active mechanical vibration control. This thesis works with laboratory model of steel cantilevered beam. A corresponding mathematical model is created for this beam. This is done both by analytical solution and by experimental identification, which helps in accurate mathematical model. The behaviour of the beam oscillations can be tested in MATLAB Simulink. MPC and LQR controller is designed for the mathematical models of the three modes of oscillation and these methods are compared with each other. The thesis also describes the designed MPC-based S-function, which is implemented in MATLAB Simulink environment.

The science behind pizza!

