

Identification (recursive methods)



Component

École Nationale
Supérieure
d'Électrotechnique
d'Électronique
d'Informatique
d'Hydraulique
et des
Télécommunications

In brief

- **Ametys Code:** N8EE16C
- **Open to exchange students:** Yes

Presentation

Objectives

Design online identification methods for representing linear systems

Description

General information

1. Least squares estimation
2. The gradient method
 - "a priori" prediction
 - "a posteriori" prediction
3. Recursive least squares
4. Some important considerations

- excitation signal
- whiteness of the prediction error sequence

5. Extended least squares

Application:

Identification of a system with slowly varying parameters

Pre-requisites

Sampled systems

Z transform

Transfer function