

Distributed Algorithms: modelling, verification and experimentation (ASPD)

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Abstract

This repository contains course notes, exercises, models and projects from two courses given as part of master's level training on modelling and verifying distributed algorithms.

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1 Documentation and Tools

The TLA+ ToolBox platform is available at the following link.

The Rodin platform is available at the following link.

The Prob platform is available at the following link.

The Frama-c platform is available at the following link.

The Synchrone Reactive Toolbox for LUSTRE is available at the following link.

The Kind 2 platform is available at the following link.

2 Course ASPD apprenticeship at Telecom Nancy

2.1 Slides for the course

2.1.1 Lecture 0 Overview of the course

Overview of the course

2.1.2 Lecture 1 Modélisation, spécification et vérification

Modélisation, spécification et vérification

2.2 Lectures Notes

Notes sur la logique Notes sur la logique.

Notes sur la vérification Notes sur la vérification.

2.3 Tutorials

Serie 1 Tutorials serie 1.

TLA solutions for serie 1 .

Serie 2 Tutorials serie 2.

TLA solutions for serie 2..

2.4 Assessment

The assessment of students is based on three works:

- Two written exams: E1 and E2
- A practical exam: TP

References