ESCUELA POLITÉCNICA SUPERIOR DE MONDRAGON UNIBERTSITATEA
MONDRAGON UNIBERTSITATEKO GOI ESKOLA POLITEKNIKOA
MONDRAGON UNIVERSITY FACULTY OF ENGINEERING

Trabajo presentado para la obtención del título de
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GRADO EN INGENIERÍA EN INFORMÁTICA
INFORMATIKAKO INGENIARITZA GRADUA
DEGREE IN COMPUTER ENGINEERING

Título del Trabajo *Lanaren izenburua* Project Topic

RUNTIME VERIFICATION FOR SPATIO-TEMPORAL PROPERTIES (WITH AGGREGATED OPERATORS)

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Company where the project is being developed
TU WIEN

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Index

1. Introduction

Cyber Physical Systems

In our live, we are surrounded by CPSs and SoCPSs due to an increasing number of intelligent systems that involve safety, life and business-critical requirements in domains such as transportation, healthcare or home equipment.

Runtime Verification

Monitoring information related to the internal status of the CPSs at runtime can anticipate the occurrence of failures. This makes it possible to take corrective actions earlier and prevent faulty scenarios.

1.1. Objectives

Dfsdf

1.2. Project phases

Spatio-temporal properties

STREL…

2. Product specifications and requirements

The scope of the work is monitoring spatio-temporal properties using logic-based specification languages. Goal of the student work is to evaluate existing technologies for Runtime Verification of Spatio-Temporal properties over smart cities such as SaSTL. Further, to identify best practices and implement a demonstration methodology based on one of the use-cases defined in the project. Lastly, the method will be tested in order to establish a grade of improvement compared to earlier and state-of-the-art techniques. Writing a technical report on the work performed and the achieved results.

2.1. Description of the service

2.2. Resources and materials

2.2.1. Hardware

sdfghj

2.2.2. Software

sdfgh

2.3. Tests and trials

2.4. Conditions for the implementation of the project

2.5. Legal aspects

General Data Protection Regulation (GDPR):

3. State of the art

4. Office use case

5. Development (subject to change)