

Informatique

Rust for Audio

IDENTIFICATION

CODE : TC-5-SI-EC-RAU
ECTS : 2.0

HOURS

Lectures : 0.0 h
Seminars : 0.0 h
Laboratory : 32.0 h
Project : 0.0 h
Teacher-student
contact : 32.0 h
Personal work : 8.0 h
Total : 40.0 h

ASSESSMENT METHOD

TEACHING AIDS

Little project [6-8h] during last
courses

TEACHING LANGUAGE

English

CONTACT

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AIMS

The aim of this course is to introduce the fundamentals of the RUST language by illustrating a particular domain: Audio signal processing. TC students have all followed the 3TC SON course, in which Romain Michon provides a primitive audio library containing C++ programs for making some audio synthesis or effect [sine wave, sawtooth wave, echo, etc.].

CONTENT

The first part of the course [10h] will be used to introduce, through small simple exercises, the concepts to be mastered for programming in RUST. The second part will be dedicated to the realization of a [small] audio project chosen by each student [probably in pairs]. Projects will be modelled on those in the current AUD course [url{https://embaudio.grame.fr/#final-projects}].
The

PRE-REQUISITE

PREREQUISITES

- C/C ++
- Linux/Unix/Terminal
- Basic signal processing
- Bisec audio signal processing, SON course: <https://inria-emeraude.github.io/son/>

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