DAAVVE project.

Objectives: Identify the main issues raised by machine learning and multi-agent techniques for the development of safety critical systems

- Define a collaborative project workplan to tackle those issues

66,5K
euros

12
months

IRIT/SMAC,
IRIT/ACADIE,
IMTONERA

Technological approach

- Static analysis (STA) is **safe** but **complex** – so **expensive** – **to implement**.

- Measurement-based timing analysis (MBTA) methods, and more specifically **probabilistic** MBTA are relatively **easy to implement** but a **high confidence level is hard to obtain**.

- The goal of C-PASTA is to investigate how to **decrease the STA modeling effort** and **increase the confidence level** on MBPTA estimations by **combining the two methods**.

- Towards that goal, we propose (i) to identify the architectural elements that contribute the most to the execution time, (ii) to focus the STA modeling effort on those elements, (iii) to leverage the HW model used by STA and the SW analysis performed by STA to improve the measurement coverage of MBPTA.

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