

Practical Experiences of Applying Source-Level WCET Flow Analysis on Industrial Code

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Code-level timing analysis, such as Worst-Case Execution Time (WCET) analysis, takes place at the binary level. However, much information that is important for the analysis, such as constraints on possible program flows, are easier to derive at the source code level since this code contains much more information. Therefore, different source-level analyses can provide valuable support for timing analysis. However, source-level analysis is not always smoothly applicable in industrial projects.

In this talk we report on the experiences of applying source-level analysis to industrial code in the ALL-TIMES FP7 project: the promises, the pitfalls, and the workarounds that were developed. We also discuss various approaches to how the difficulties that were encountered can be tackled.

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