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Book Chapter

Timing Analysis Methodology

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Abstract

This chapter focuses on the analysis of the timing behavior of software applications that expose real-time (RT) requirements. The state-of-the-art methodologies to timing analysis of software programs are generally split into four categories, referred to as static, measurement-based, hybrid, and probabilistic analysis techniques. First, we present an overview of each of these methodologies and discuss their advantages and disadvantages. Next, we explain the choices made by our proposed methodology in Section 5.2 and present the details of the solution in Section 5.3. Finally, we conclude the chapter in Section 5.4 with a summary.