

Asynchronous Programming in the Abstract Behavioural Specification Language

Azadbakht, K.

Citation

Azadbakht, K. (2019, December 11). Asynchronous Programming in the Abstract Behavioural Specification Language. Retrieved from https://hdl.handle.net/1887/81818

Version:	Publisher's Version
License:	<u>Licence agreement concerning inclusion of doctoral thesis in the</u> <u>Institutional Repository of the University of Leiden</u>
Downloaded from:	https://hdl.handle.net/1887/81818

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <u>http://hdl.handle.net/1887/81818</u> holds various files of this Leiden University dissertation.

Author: Azadbakht, K. Title: Asynchronous Programming in the Abstract Behavioural Specification Language Issue Date: 2019-12-11

Part IV

Deadlock Analysis

This part consists of the following chapter:

Chapter 6 In this chapter, we introduce an approach for detecting deadlocks in an actor-based program in ABS. The underlying language features active objects, that communicate asynchronously, and cooperative scheduling of the tasks belonging to an object. To this aim, we model the system as a well-structured transition system based on predicate abstraction and prove the decidability of the deadlock detection.