

Linking theories of concurrency

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Abstract: We construct a Galois connection between the theories that underlie CCS [7] and CSP [4]. It projects the complete transition system for CCS onto exactly the subset that satisfies the healthiness conditions of CSP. The construction applies to several varieties of both calculi: CCS with strong, weak or barbed simulation, and CSP with trace refinement or failures refinement, or failures/divergence. We suggest the challenge of linking other theories of concurrency by Galois connection. ?? Springer-Verlag Berlin Heidelberg 2005.

Index Keywords: Computer simulation; Computer system recovery; Barbed simulation; Complete transition system; Failures refinement; Galois connection; Concurrency control

Year: 2005

Source title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Volume: 3722 LNCS

Page : 303-317

Link: Scopus Link

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Sponsors: United Nations University, Int. Inst. for Softw. Technol., China; Vietnam National University, Hanoi, Vietnam; Vietnam Academy of Science and Technology, Vietnam

Conference name: 2nd International Colloquium on Theoretical Aspects of Computing - ICTAC 2005

Conference date: 17 October 2005 through 21 October 2005

Conference location: Hanoi

Conference code: 67252

ISSN: 3029743

ISBN: 3540291075; 9783540291077

DOI: 10.1007/11560647_20

Language of Original Document: English

Abbreviated Source Title: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)

Document Type: Conference Paper

Source: Scopus

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