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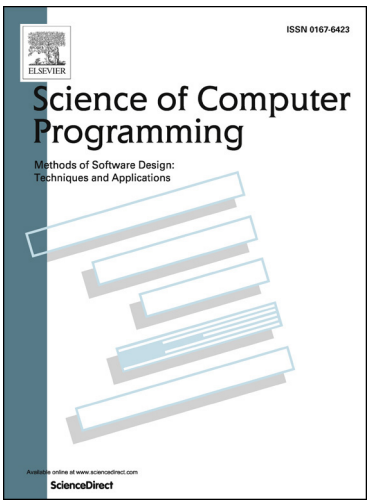

Derivation of algorithmic control structures in Event-B refinement

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Highlights

- Introducing an approach for making the control flow in Event-B explicit.
- The approach augments Event-B with a scheduling language for specifying the control flow.
- A number of refinement patterns for refining a schedule to a concrete level are introduced.
- The correctness of the control flow is verified by removing the original guards from events in a schedule.
- The approach is applied to the famous Schorr-Waite algorithm.

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