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Formally verifying Exceptions for Low-level code with Separation Logic

Marco Paviotti, Jesper Bengtson

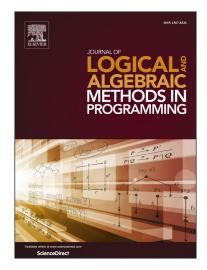
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Highlights

- Extended semantics for exception handling.
 New rules for verification of assembly programs with exceptions.
 Proof of concept: Memory allocation with exceptions.
 All results are mechanised in Coq.

- The extension to the logic is conservative.

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