# ESBMC 1.24.1 (Competition Contribution)

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  - optimized encodings for pointers, bit operations, unions and arithmetic over- and underflow
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- derived from CBMC (v2.9) and has inherited its objectbased memory model

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- support for several C++ features: polymorphism, inheritance, exception handling, templates and STL (using models)

#### **Differences to ESBMC 1.22**

- ESBMC 1.24.1 is largely a bugfixing release, but also:
  - Improved new intermediate representation
    - $\rightarrow$  increased ESBMC's speed by 2x
  - Support for boolector (>= 2.0), replaces Z3 as default solver
  - Descresead memory usage by ~23%.
- Several bug fixes on both sequential and parallel kinduction approach.

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#### Overall:

- Second highest correct results (3898)
- Highest number of false correct (318) and third higher false incorrect (122)
- MemorySafety and Termination: fail to conform on the new report scheme

## Thank you!

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