

Static Analysis at Bosch

Saarbrücken, May 21, 2019: Since spring 2018, AbsInt Angewandte Informatik GmbH provides a worldwide use license for the static program analyzers Astrée and RuleChecker to Robert Bosch GmbH.

Astrée proves the absence of runtime errors and invalid concurrent behaviors in embedded C programs. The runtime errors covered include safety-relevant program defects and cybersecurity vulnerabilities, e.g. divisions by zero, out-of-bounds array accesses, buffer overflows, dangling and null pointers accesses,

RuleChecker computes code metrics and checks coding guidelines for C/C++ programs, including MISRA C/C++, CWE, ISO/IEC TS 17961, and SEI CERT C.

"We are happy to see that our recent efforts to speed up the analysis for huge code bases and the recent extensions to handle data races and inconsistent locking and C++ have paid off", said Dr. Christian Ferdinand, CEO of AbsInt.

With the support of AbsInt, the two analyzers were integrated into the development and verification processes for steering systems at the division automotive steering of Bosch as a pilot project within Bosch.

Bosch also licensed the qualification modules for Astrée and RuleChecker. They contribute to an automatic tool qualification process, e.g. with regard to ISO 26262.

The driving factors for Bosch to switch to AbsInt tools were the faster analysis speeds, improved accuracy and less time needed for results reviews compared to previously used tools, and flexible licensing policy by AbsInt.

About AbsInt

AbsInt provides cutting-edge development tools for embedded systems with a focus on validation, verification, and certification of safety-critical software. AbsInt tools will ensure reliable and robust software that usually means less expensive and faster development cycles.

The company name is an acronym for "abstract interpretation", a sophisticated approach to static program analysis on which many of the company's highly successful products are based. Founded in 1998, AbsInt is a privately-held company in Saarbrücken, Germany.

For further information, visit <u>www.absint.com</u>.

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