



## ABOUT US

To improve software quality and reliability cost-effectively, we provide automated SW testing tools/process/consulting/training.

V Plus Lab is founded by KAIST professors and researchers of Software Testing and Verification Group (<http://swtv.kaist.ac.kr>), who has developed automated software testing/debugging techniques and tools with industries for decades.



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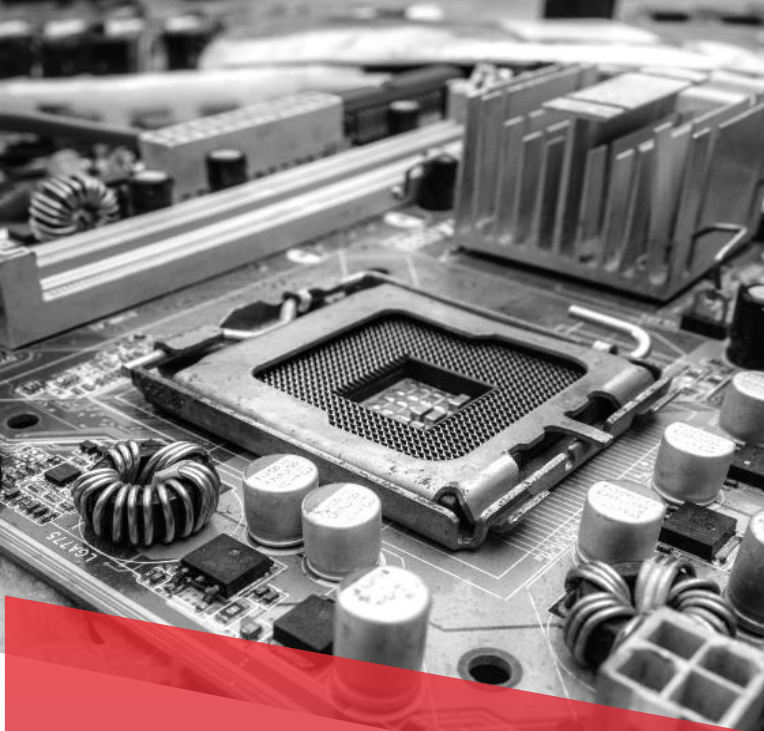
Website <https://vpluslab.kr>

# V PLUS LAB

Innovating SWTesting



<https://vpluslab.kr>



## TRULY EFFECTIVE AUTOMATED SW TESTING TOOL

Our mission is to support industries to improve SW quality and reliability cost-effectively by adopting automated SW testing and debugging tools, which have following advantages over conventional manual SW testing practice:

- **Highly increased SW code coverage and bug detection ability**, by testing all possible corner-case scenarios identified by advanced static and dynamic SW analysis techniques.
- **Significantly decreased SW testing cost and time**, because of automatically generating millions of effective test inputs by running automated SW testing tools 24 hours/day.

*“By replacing 90% of manual SW testing tasks, CROWN 2.0 can more than double the SW testing efficiency”*

## FIELD PROVEN EXPERTIES

Since 2009, we have worked with dozens of companies and showed the effectiveness of AI based Concolic testing techniques, by

- Automatically achieving 90% of branch coverage (80% of MC/DC coverage), and
- Detecting numerous critical bugs.
- News Article: Mobis, Adopting AI-based SW Verification System... “Double the Efficiency” (Yonhap news, 2018/07/22)



## CROWN 2.0

### Automated SW Unit Testing Tool Based on AI-based Concolic Testing Techniques

CROWN 2.0 automatically generates unit test driver/stubs and test inputs that achieve high code coverage and detect many bugs.

The core asset of CROWN 2.0 is its Concolic testing engine; after analyzing target source code, it automatically generates numerous unit test inputs that exercise all possible execution paths of a target unit under test.

