

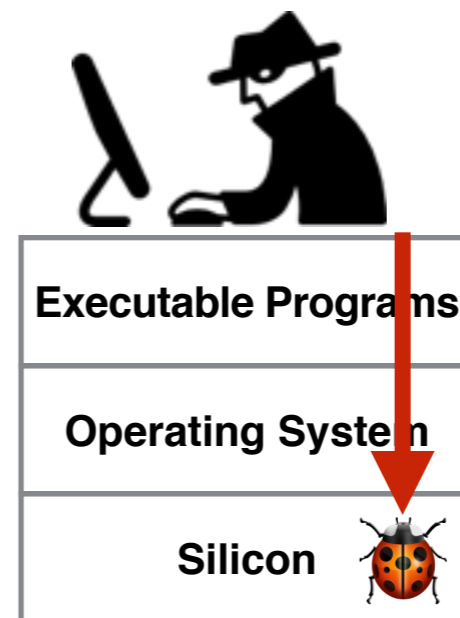
Identifying Security Critical Properties for the Dynamic Verification of a Processor

Rui Zhang, Natalie Stanley, Christopher Griggs,
Andrew Chi, Cynthia Sturton

Wednesday 8:30am Session **7B** (Security)

Problem

How to find the security properties we should protect for a processor?

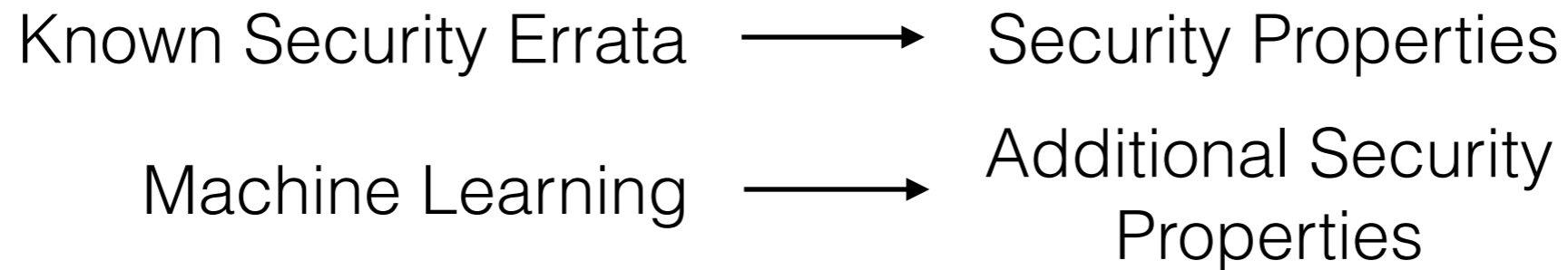
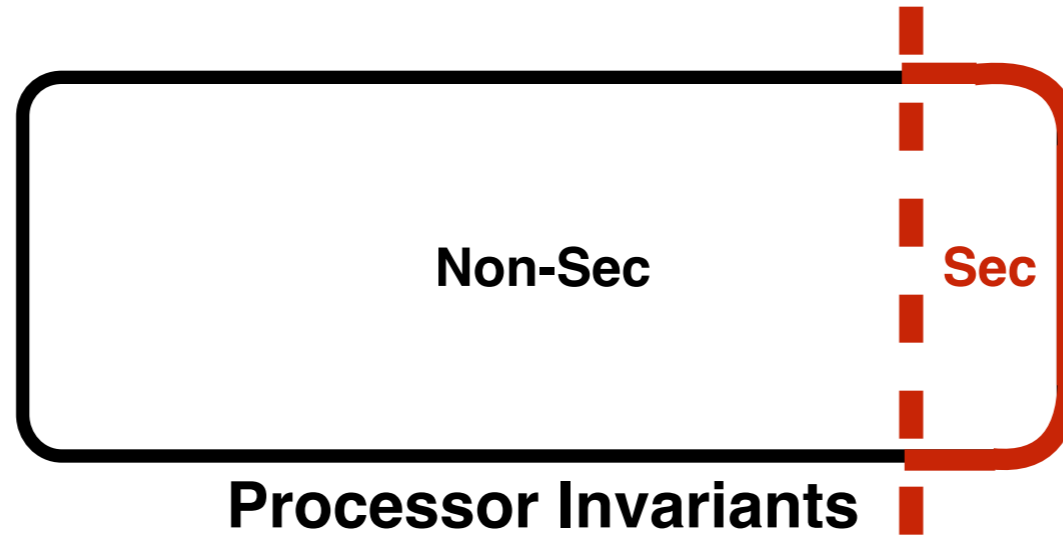


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Solution



Main Results

Security Properties

22

Manually Intensive

Crafted from the Specification
manually, Error-prone

SCI Finder

19 + 3

Semi-automatic

Manual Efforts: classifying errata,
validating the reported SCI

← **New**

These security properties are able to detect 12 new bugs which are not used in the development of the properties.



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