



ACM SIGSOFT International Symposium
on Software Testing and Analysis
(ISSTA'17)



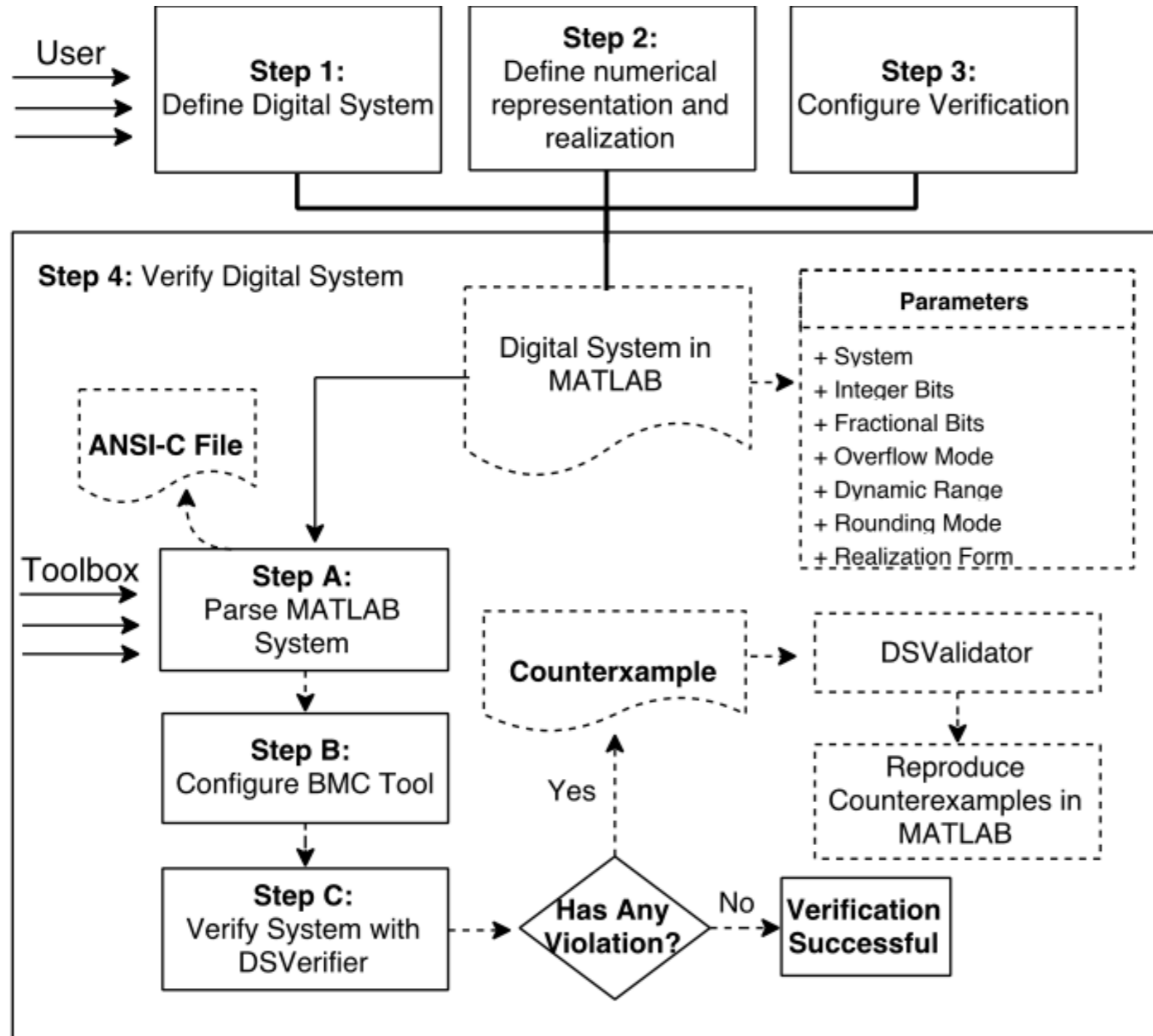
Verifying Digital Systems with MATLAB

Joint work with Lennon Chaves, Iury Bessa,
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AI for Code

DSVerifier Toolbox: BMC tool to check design errors in digital systems with MATLAB

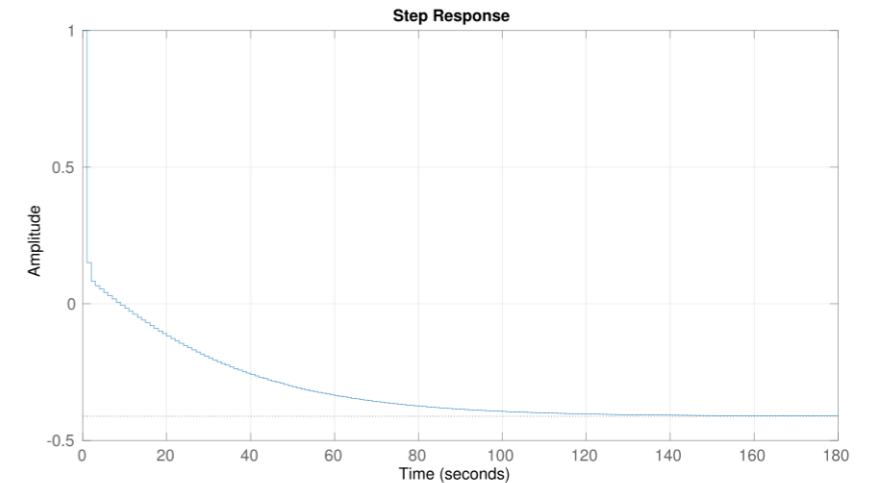
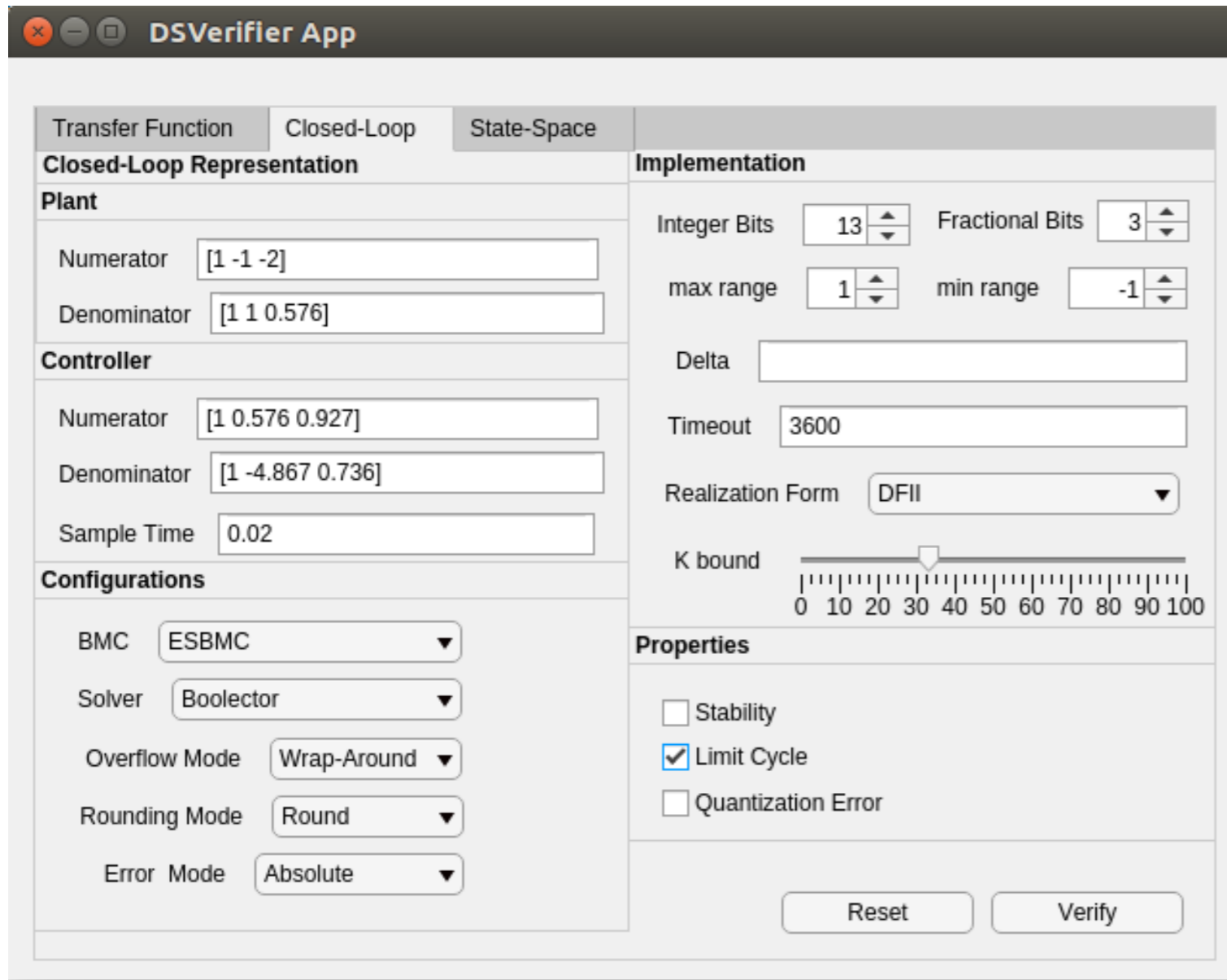


CBMCMC

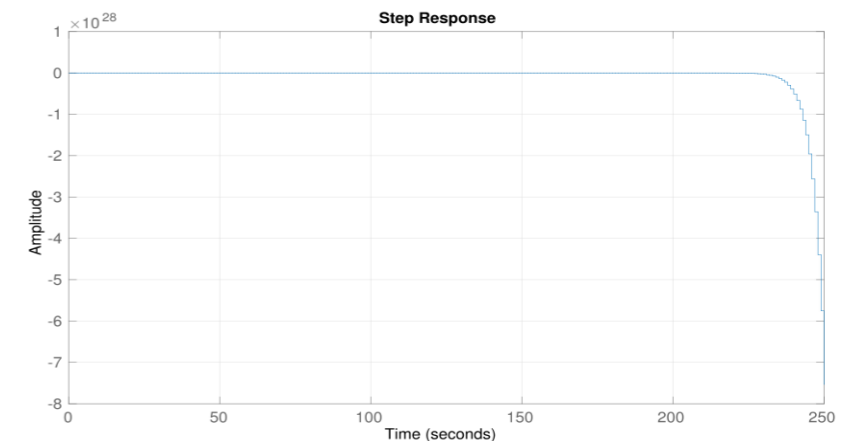
ESBMC

DSVerifier Toolbox: Illustrative Example

- The different **numerical representations** for a given digital system can yield different **verification results**



successful verification: **stable** system using $\langle 2, 13 \rangle$



failed verification: **unstable** system using $\langle 13, 2 \rangle$