

Collaborative Research: FMitF: Track I: Synthesis and Verification of In-Memory Computing Systems

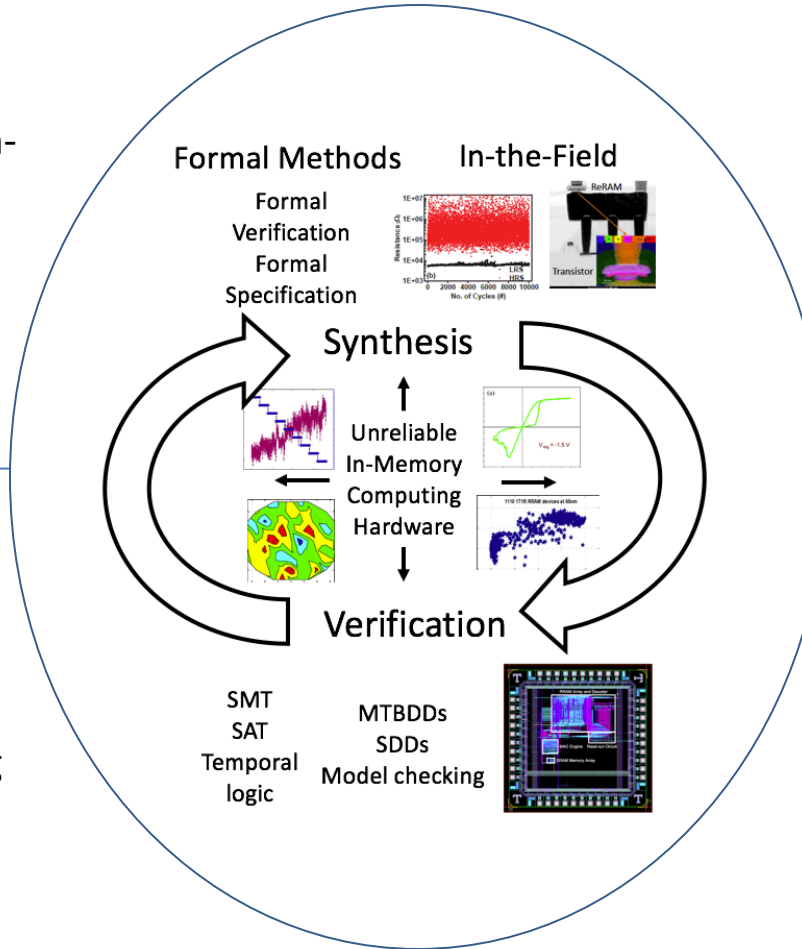


Challenge:

- Impact of Unreliable In-Memory Computing Hardware
- Non-viable Computing System Design

Solution:

- Ecosystem of Formal Verification Tools
- In-Field Verification of In-Memory Computing System Performance



Scientific Impact:

- Verification of Neural Networks to be Accelerated using Analog In-Memory Computing (IMC)
- Synthesis and Verification Techniques for Hybrid Analog-Digital IMC Systems

Broader Impact and Broader Participation:

- In-Memory Computing, Artificial Intelligence, Formal Methods Areas
- Earlier Time to Market for Emerging Technology
- Workshops for High School Students
- Curriculum Development

Project info (2319399, UF/FIU/UAlbany, rewetz@ufl.edu, sumit.jha@fiu.edu, ncady@albany.edu)

