

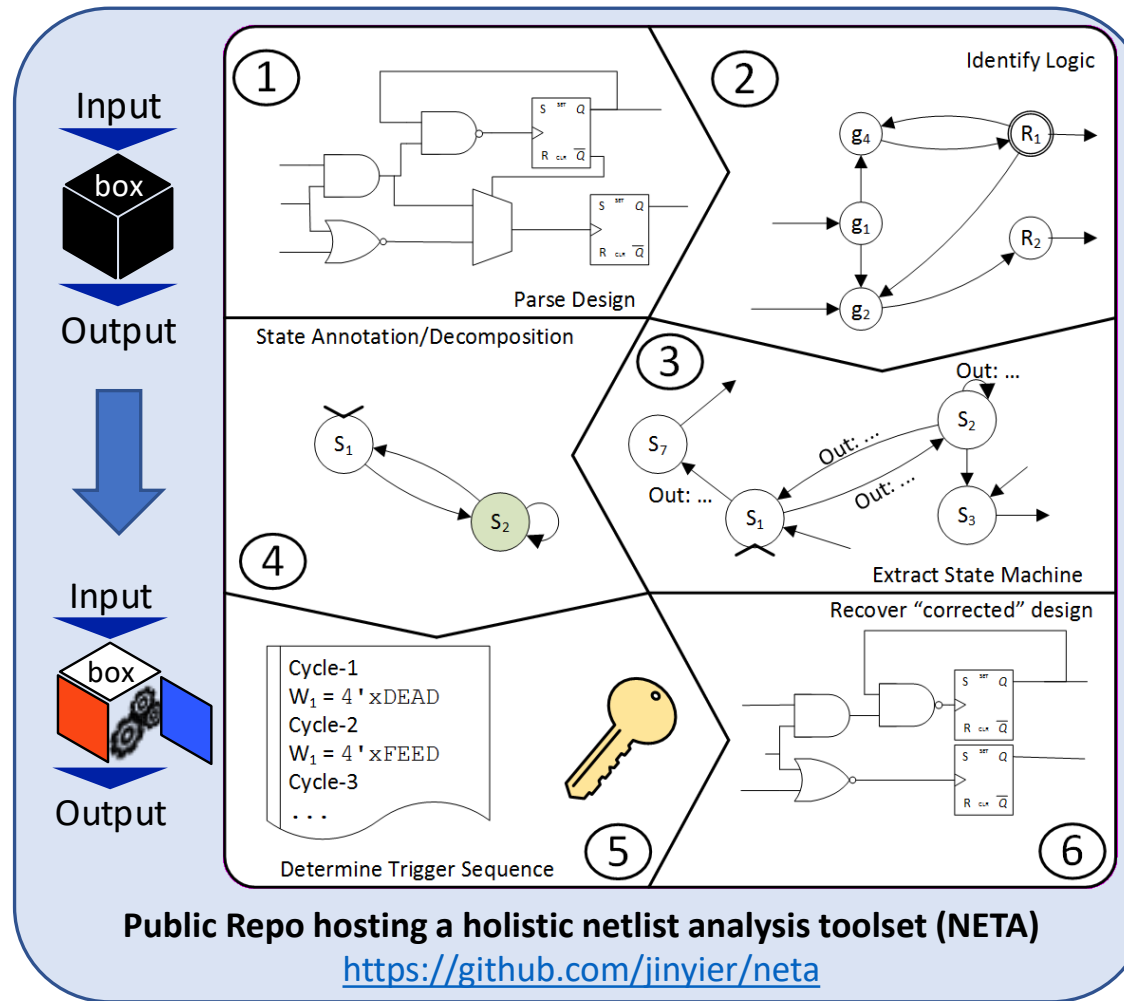
SaTC: TTP: Medium: Collaborative: RESULTS: Reverse Engineering Solutions on Ubiquitous Logic for Trustworthiness and Security

Challenges:

- Untrusted third-party IPs
- Outsourced fabrication and packaging services
- Lack of scalable methods for large-scale SoC security

Solutions:

- High-level functionality reconstruction
- Whitelist and blacklist based hardware Trojan detection
- Transition to Practice with industrial collaborators



Intellectual Merit:

- A comprehensive framework for netlist security analysis
- No golden model is needed
- EDA tools will be delivered for automation and scalability

Broader Impacts:

- Protect US semiconductor businesses against attacks
- Educate students on hardware and microelectronics security
- Lead to industrial practices, e.g., a startup, to disseminate the developed tools

Pls: Jia Di (UArk), Shuo Wang (UF) (Former PI: Yier Jin), Shaojie Zhang (UCF)

