# SHF: Small: Detecting the 1%: Growing the Science of Vulnerability Detection

Challenge:

- Improper storage of secrets creates the very real hazard that they will be leaked to the public or to insider threats

Solution:

- Efficiently and effectively detect a wide range of vulnerability types
- Identify which bugs have security implications
- Robust model against non-adaptive, white-box, and non-targeted adversarial evasion attacks

Vulnerability Detection Effectiveness and Efficiency

Adversarial evasion attacks

Exploitability

Security Bug Report Identification
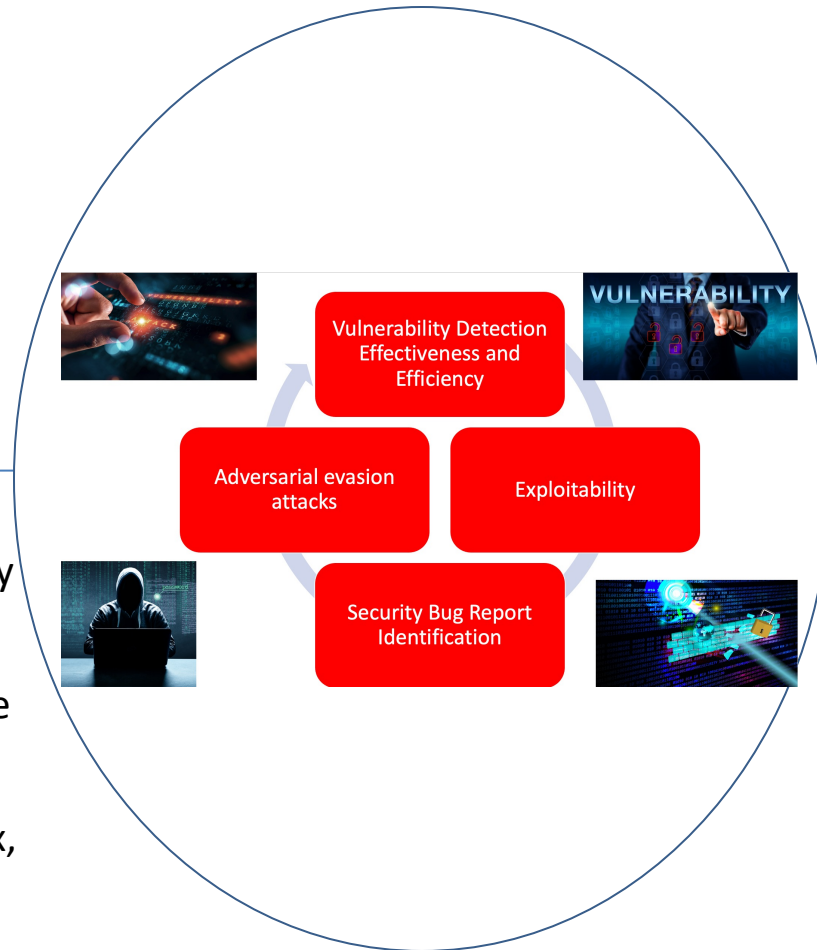
Scientific Impact:

- Scientific understanding of vulnerabilities
- Prioritized vulnerability detection and mitigation

Broader Impact and Broader Participation:

- More secure systems to perform critical functions and to process, store, and communicate sensitive information securely
- Educational resources
- Participation of underrepresented students