

CAREER: Machine Learning Assisted Crowdsourcing for Phishing Defense



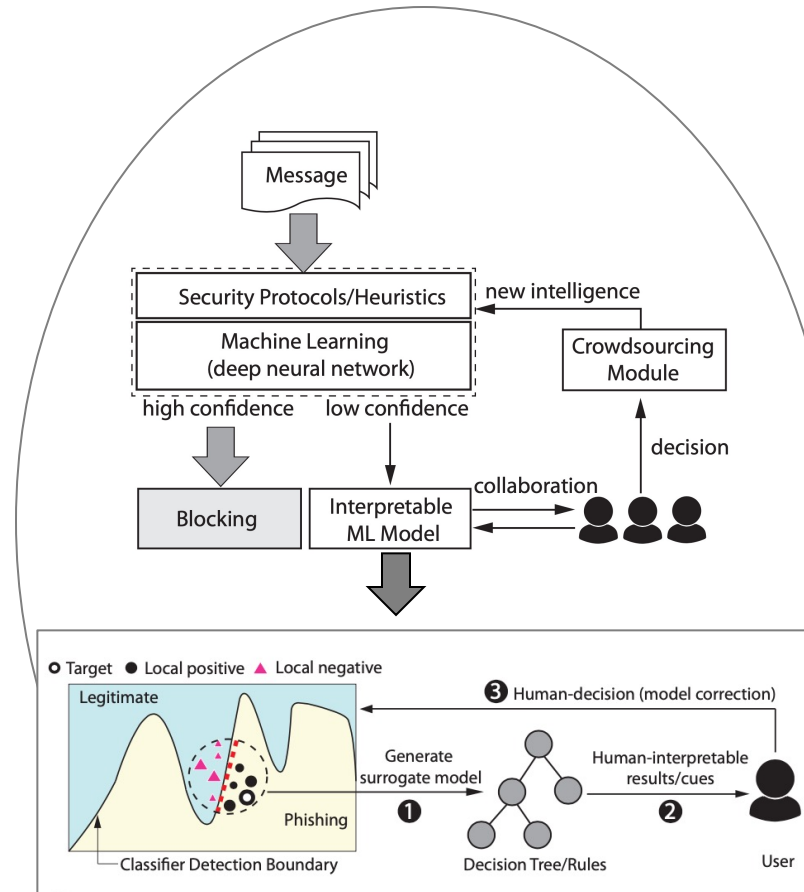
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Challenge:

- System-level phishing defense cannot be 100% accurate
- Miscommunications between the defense system and users

Solution:

- Machine learning (ML) assisted crowdsourcing
- Measurement + crowdsourcing: detect new phishing tactics
- Defense with ML and explanation techniques



Scientific Impact:

- Uncover new vulnerabilities in existing phishing defenses
- New understanding of real-world phishing tactics
- New defense system with Explainable AI (XAI)

Broader Impact and Broader Participation:

- Release phishing detection tools and datasets
- Mentor underrepresented students
- Work with stakeholders such as APWG, Google, Firefox

Project #: CNS-2030521

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