

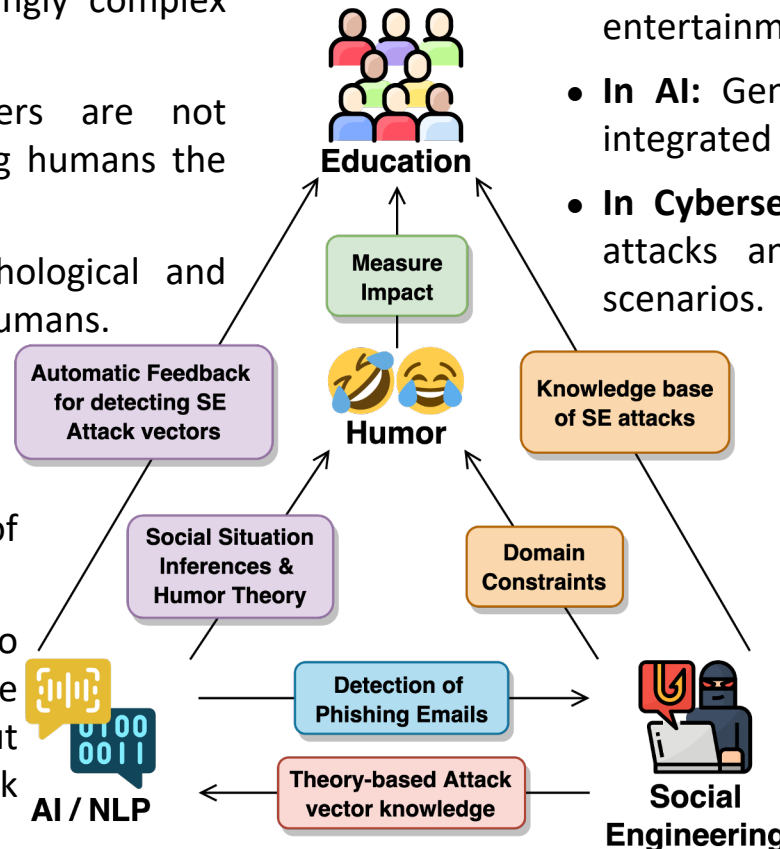
# EAGER: SaTC-EDU: AI-based Humor-Integrated Social Engineering (SE) Training

## Challenge

- SE is low cost with increasingly complex subtle attack vectors.
- Majority of computer users are not cybersecurity literate, making humans the weakest link.
- SE attacks target the psychological and emotional vulnerabilities of humans.

## Solution

- Create a knowledge base of diverse SE attacks.
- Train language models to detect SE emails; generate user feedback (with or without humor) on detecting SE attack vectors.
- Compare humor-integrated and regular SE knowledge retention.



## Scientific Impact

- **In Education:** Application of AI as an entertainment-based pedagogical tool.
- **In AI:** Generation of user-specific humor-integrated feedback.
- **In Cybersecurity:** Mapping anatomy of SE attacks and AI to predict novel attack scenarios.

## Broader Impact and Broader Participation

- Create learning experience for non-cybersecurity professionals
- Disseminate findings through academic journals and non-security venues, like Humor Studies Annual Conference

Award #2039605, Purdue University  
PIs: Julia Rayz, Ida Ngambeki