Abstract

Protecting against intentional attacks on homeland security is fundamentally different from protecting against accidents or acts of nature. In particular, an intelligent and adaptable adversary may adopt a different offensive strategy in response to our protective security measures, in order to circumvent or disable them. Game theory provides a way of taking this into account analytically. Thus, security can benefit from game-theoretic methods. This talk discusses approaches for applying game theory to the problem of defending systems against attack. The results yield insights into the nature of optimal defensive investments.