

Game theory can help protect against terrorist attacks

December 6 2016

A new article explains how game theory and algorithms are being used to optimize security and patrol schedules to prevent terrorist attacks.

In the *Significance* article, Dr. Thanh Nguyen notes that defenders must perpetually defend numerous targets using a limited number of resources, whereas attackers are able to surveil and learn defenders' strategies and attack after careful planning.

Game-theoretical algorithms can be used by defenders to optimally randomize their patrols so that attackers cannot predict which target defenders are going to protect at any given time.

"There are applications deployed in the real world that have led to measurable improvements in security," said Dr. Nguyen. "For example, games and calculations of this sort have been used by the United States Coast Guard since 2011 to protect both passenger ferries and ports."

More information: *Significance* , [DOI: 10.1111/j.1740-9713.2016.00978.x](https://doi.org/10.1111/j.1740-9713.2016.00978.x)

Provided by Wiley

Citation: Game theory can help protect against terrorist attacks (2016, December 6) retrieved 23 April 2024 from <https://phys.org/news/2016-12-game-theory-terrorist.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.