

Artificial intelligence based on game theory can boost conventional security system

Ankur Tewari, TNN | Aug 10, 2015, 09.41 PM IST

GANDHINAGAR: Artificial intelligence can significantly boost conventional security systems. This is what Prof Milind Tambe from University of Southern California (USC) told his audience while speaking on the 4th lecture of 'The Roddam Narasimha Lecture Series' at Indian Institute of Technology Gandhinagar (IIT-Gn) on Monday.

Prof Tambe has developed new algorithms which can calculate effective proportions of security personnel to be deployed at different areas. The algorithms also generate schedules for these security personnel. The application of these algorithms has proved to yield more efficient security as compared to the earlier methods. Prof Tambe's algorithms which are based on game theory are currently used at various places including the United States Coast Guard, Los Angeles Sheriff's Department, Federal Air Marshal's Service, Los Angeles Airport Police and other places.

Prof Tambe said that the key is to generate quick, strategic schedules for the security personnel. He said that the algorithms have been put to real-life tests where the effectiveness of conventional security systems are compared with the one assisted by his algorithm based intelligence. "The one based on algorithm proved to be more effective by significant amount," he said.

Prof Tambe said that degree of effectiveness varies from one case to another. In one of the cases where the Game Theory based algorithm was applied at a railway station in US, the effectiveness of the security increased by 60%. Prof Tambe said, "The security personnel were able to catch more weapons and ticketless travellers."

He said that the security issues such as border security or security for women in India could be addresses in a much more effective manner through the assistance of such Game Theory based algorithms.