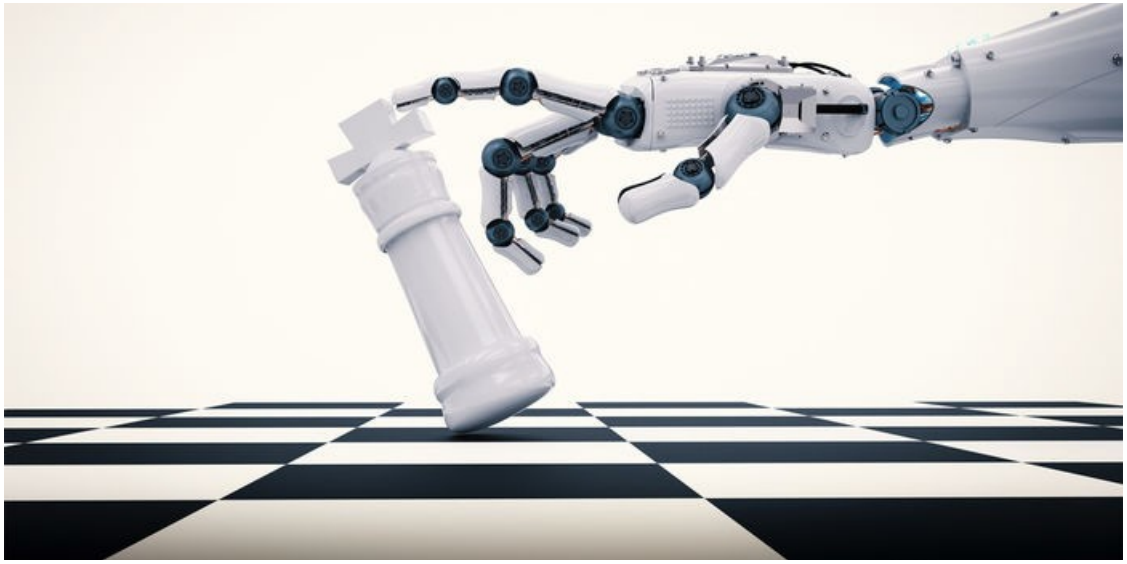

Computers can do more than win at chess—a new algorithm now allows them to best humans at cooperative games like "prisoner's dilemma." PhonlamaiPhoto/iStockphoto

Computers learn to cooperate better than humans

By Jackie Snow | Mar. 28, 2017 , 1:15 PM

For the first time, computers have taught themselves how to cooperate in games in which the objective is to reach the best possible outcome for all players. The feat is far harder than training artificial intelligence (AI) to triumph in a win-lose game such as chess or checkers, researchers say. The advance could help enhance human-machine cooperation.

Twenty years ago, a supercomputer bested the then–reigning world chess champion Garry Kasparov. More recently, AI researchers have developed programs that can beat humans at more computationally demanding games, such as **Go** and **poker**. But those are all winner-take-all or "zero-sum" games, in which one player wins and everybody else loses. Researchers have done less work on cooperative games in which the goal is for players to work together to optimize the outcome for everyone involved—even if logic demands that a player could improve his or her personal outcome by "betraying" the other players.