The Prisoner's Dilemma

cellular automaton

The prisoner's dilemma is a well known paradox that demonstrates why two completely rational individuals might act in their own self-interest even if their course of action does not result in the ideal outcome.

In this dilemma, two members of a criminal gang are imprisonned after commiting a minor crime. The prosecutors are convinced that they are involved in a recent bank robbery and thus give them two choices : remaining silent, or rat out their partener.

Their choices will affect their sentence.

Prisoner 1 \ Prisoner 2	Cooperate	Betray
Cooperate	Both half a year in prison	Prisoner 1, ten years in prison Prisoner 2, is free
Betray	Prisoner 1, is free Prisoner 2, ten years in prison	Both five years in prison

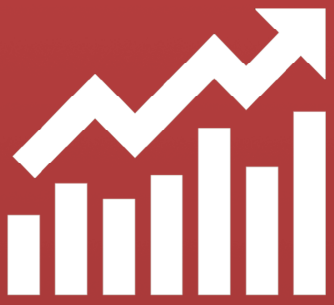
cellular automaton

grid

A grid is filled with cells, each of them playing the prisoner's dilemma with their neighbors.

Each cell has a strategy and an associated color.

Data about the game is then plotted on graphs



data plotted on graphs

made with

LiveCharts

Visual Studio

T.IS-E2B

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