
PAWEL PRALAT, Ryerson University

A probabilistic version of the game of Zombies and Survivors on graphs

In the probabilistic version of the game of Zombies and Survivors, a set of zombies attempts to eat a lone survivor loose on a given graph. The zombies randomly choose their initial location. At each round, they move to the neighbouring vertex that minimizes the distance to the survivor (chosen uniformly at random). The survivor attempts to escape from the zombies by moving to a neighbouring vertex or staying on his current vertex. The zombies win if eventually one of them eats the survivor by landing on their vertex; otherwise, the survivor wins.