

DATA TRANSMISSION IN UNDERWATER ACOUSTIC COMMUNICATION USING GAME THEORY ALGORITHM

1N.Hemavathy, 2Srinath.S, 3Rakesh.S, 4Prasanth.K, 5Mohammed Ibrahim.M

1Assistant Professor, ECE, Velammal Engg College, Chennai.

2, 3, 4,5UG Students, ECE, Velammal Engg College, Chennai.

In underwater sensor networks (UWSNs), one of the core concerns is to decrease the energy consumption in order to maximize the lifetime. This work focuses on multiple sensor networks governed by different authorities. If the authorities are willing to cooperate by forwarding each other's packets, the global lifetime could be increased. However, a selfish authority could exploit the others' collaborative behaviours. To investigate this cooperation, we apply concepts such as evolutionary game theory. A foremost study of a straightforward model determines that cooperation underwater can materialize without incentives. Then, we explore with an extended model what influences cooperation and in which way. Finally, we demonstrate how a new authority can fine tune its strategy when deploying its UWSN.