

African Buffalo Optimization Algorithm for Collision-Avoidance in Electric Fish

Julius Beneoluchi Odili¹, A. Noraziah², Mohd Helmy Abd Wahab³

¹Department of Mathematical Sciences, Faculty of Natural and Applied Sciences, Anchor University, Lagos

²Faculty of Computer Systems and Software Engineering, Universiti Malaysia Pahang, Kuantan, Malaysia

²Centre of Excellence, Universiti Malaysia Pahang, Kuantan 26300, Malaysia

³Faculty of Electrical and Electrical Engineering, Universiti Tun Hussein Onn Malaysia

ABSTRACT

This paper presents the African Buffalo Optimization algorithm for collision avoidance among electric fishes. Collision-avoidance in electric fish finds correlation with the Travelling Salesman avoiding the cities he has earlier visited. Collision avoidance in electric is akin to collision-avoidance in modern day driverless cars being promoted by Google Incorporation and other similar companies. The concept of collision-avoidance is also very useful to persons with visual impairment as it will help them avoid collision with objects, vehicles, persons, especially other visually-impaired. After a number of experimental procedures using the concept of the travelling salesman's problem to simulate collision-avoidance in electric fish, this study concludes that the African Buffalo Optimization is a veritable tool for simulating collision-avoidance in electric fishes.

KEYWORDS:

African Buffalo Optimization, Collision-avoidance, Computational Intelligence, Electric fish, Neuroscience, Travelling Salesman's Problems.

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