Robot - Chaos

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ABSTRACT:

This paper reviews the state-of-the-art technologies and principles underlying the novel interaction between the science of robotics and chaos theory which has resulted to the modelling and integration of various topological, dynamical and evolutionary characteristics associated with humans and mammals into robots and the interplay between these characteristics and new behaviours in mobile robots. Application of chaos in robotics has facilitated the emergence of a new genre of humanoids and other highly complex autonomous systems in the form of underwater, aerial and mobile robots that have found applications in the educational, engineering, entertainment, medical and military fields. Current trends in robotics and the seemingly boundless world of chaos in robotic research are also discussed.

Keywords: Chaos, interaction, Mobile robot, Robotic