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Investigation on data extraction trends for snake robot (Conference Paper)

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Abstract

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In this paper, an investigation of snake robot movement scenario has been discussed and analyzed. Angular velocity, snake robot movement trends and motion shape are involved in this investigation by implementation of serpentine locomotion. Experiment the real snake to extract motion and force data is quite difficult to handle. Thus a new model of the test bed for robot handling and gathering data are proposed in this research. Grid like elastic strings with a particular tension are installed on the transparent table to extract the snake motion direction data to enable the snake force calculation. Then shape measurement belt and kinect sensor will establish the motion data. A snake robot is developed in this paper to perform the preparatory experimental work to go for the real snake experiment involving snake locomotion in future. © 2014 The Authors.

Author keywords

Data extraction Investigation Snake robot

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