Simulation of Quadrupedal Mechanical Motion with Regards to the Center of Gravity

Shirota, Akane (School: Liberty High School)

Quadrupeds are useful machines for a variety of situations. To find the best design for a quadruped there needs to be significant research first with computer software and then physical prototypes. Computer aided drafting can be used to create comparisons of different quadrupedal models by using the center of gravity to determine the optimal position and orientation of limbs, and also take into account different gaits and environments. Models use known mammalian gaits to create testable simulations in a software environment with the end goal to create and test a physical model to compare the stresses and weight distribution of a physical mechanical quadruped.

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