A STUDY OF THE WALKING MODE OF BIPED ROBOTS

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ABSTRACT

TO REACH THE REASON THAT PEOPLE DEVELOPS THE ROBOTS DESIGN METHOD AND THE HIGH WALKING ABILITY OF BIPED ROBOTS. THIS THESIS STUDIES THE WALKING MODE OF BIPED ROBOTS. THROUGH D -EDUCING THE KINEMATIC EQUATION, PARAMETER THAT WALKING TRAJECTORY, RESEARCH INTO IT WAL -KS ABOUT ITS FEASIBILITY IN DIFFERENT GEOGRAPHY. THE RESEARCH STEP BE DIVIDED INTOES TH -E PROGRAMMING TO THE WALKING MODE, THE STATIC EQUILIBRIUM OF THE CENTER OF GRAVITY, THE ZERO MOMENT POINT THEORY SOLVES THE DYNAMIC EQUILIBRIUM OF THE CENTER OF GRAVITY,THE INV -ERSE KINEMATICS EQUATION SOLVES THE JOINT ANGLE OF ROTATION. THE COMPUTER PROGRAM SIMUL -ATES ITS WALKING MODE. OBSERVE IT WALKS ABOUT ITS FEASIBILITY IN DIFFERENT GEOGRAPHY.AN -ALYZE THIS BIPED ROBOT WALKING ABILITY AND METHODS. BY ESTABLISH THE WALKING TASK OF THE ROBOT,DEDUCES THE KINEMATIC THEORY, THE VALUE PAR -AMETER OF THE SIMULATE RESULT. WE DIVIDE STEP AND DISCUSS THE WALKING MODE OF BIPED ROB -OTS SYSTEMATICALLY. PROVIDING THE RELATED PERSONNEL OF THIS REALM DEVELOPS AND CREATES THE INFORMATION OF BIPED ROBOTS.

Keywords : BIPED ROBOT, ZERO MOMENT POINT, INVERSE KINEMATICS

Table of Contents

第一章　背景與簡介--P1 1.1 研究背景--P1 1.2 研究動機與目的--P3 1.3 論文架構--P5 第二章　二足機器人模型架構--P6 2.1 二足機器人數學模型--P6 2.2 向量解析方法--P7 2.3 二足機器人數學模型建立--P9 第三章　理論基礎--P13 3.1 靜態重心之方程式--P13 3.2 求重心平衡位置--P16 3.3 順向運動學方程式--P18 3.4 逆向運動學方程式--P19 3.5 動態平衡方程式--P25 3.6 地面摩擦力之推導--P27 第四章　二足機器人數值模擬--P32 4.1 二足機器人數值模擬參數值--P32 4.2 步態規劃與步行軌跡--P33 4.2.1 機器人之步態規劃--P33 4.2.2 擺線輪廓曲線--P33 4.3 步行模擬--P36 4.3.1 直線步行模擬--P36 4.3.2 轉彎步行模擬--P40 4.3.3 階梯步行模擬--P45 4.4 快步行走之討論--P61 第五章　結論--P63 5.1 結論與討論--P63 5.2 建議--P67 參考文獻--P68

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