

1. Record Nr.	UNINA9910346946503321
Autore	Kaul Lukas Sebastian
Titolo	Human-Inspired Balancing and Recovery Stepping for Humanoid Robots
Pubbl/distr/stampa	KIT Scientific Publishing, 2019
ISBN	1000091605
Descrizione fisica	1 electronic resource (X, 235 p. p.)
Collana	Karlsruhe Series on Humanoid Robotics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Robustly maintaining balance on two legs is an important challenge for humanoid robots. The work presented in this book represents a contribution to this area. It investigates efficient methods for the decision-making from internal sensors about whether and where to step, several improvements to efficient whole-body postural balancing methods, and proposes and evaluates a novel method for efficient recovery step generation, leveraging human examples and simulation-based reinforcement learning.