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## Mechanics and Control of Soft-fingered Manipulation

"Mechanics and Control of Soft-fingered Manipulation" introduces a new approach to the modeling of fingertips that have a soft pad and a hard back plate, similar to human fingers. Starting from the observation of soft-fingered grasping and manipulation, the book provides a parallel distributed model that takes into account tangential deformation of the fingertips. The model is supported with many experimental verifications and simulation results. Statics and dynamics in soft-fingered grasping and manipulation are also formulated based on this new model. The book uniquely investigates how soft fingertips with hard back plates enhance dexterity in grasping and manipulation, theoretically and experimentally, revealing the differences between soft-fingered and rigid-fingered manipulation. Researchers involved in object manipulation by robotic hands, as well as in human dexterity in object manipulation, will find this text enlightening.... *more on* <http://springer.com/978-1-84800-980-6>

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