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Modeling, Identification and Control of Deformable Soft Objects

Organizer:

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Full Day Workshop

November 2, 2007
8:30 am – 5:00 pm
FW-4

Modeling, Identification, and Control of Deformable Soft Objects

Full-Day Workshop at

2007 IEEE/RSJ International Conference on Intelligent Robots and Systems

(IROS 2007)

San Diego, California USA

Friday, November 2, 2007

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Summary

Researches on deformable soft objects such as biological tissue, food dough, thread, and wire harness are now one of emerging issues in virtual reality, computer vision, medical engineering, and robotics. We have to tackle many topics including geometric and mechanical modeling of deformable soft objects, their model identification, and control of their deformation to treat the deformable soft objects in engineering. This workshop focuses on the current researches on modeling, identification, and control of deformable soft objects. Topics are 1) geometric/mechanical modeling of deformable soft objects, in robotics, automation science, and medical engineering, 2) identification of deformation model parameters, 3) realtime simulation of object deformation, 4) control of object deformation in robotics and automation, 5) manipulation and handling of deformable soft objects, and other related issues.

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