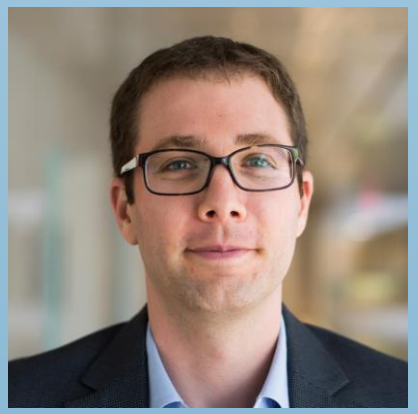
ICRA 2021 Workshop on Representing and Manipulating Deformable Objects

Lunch break
We will resume at 14:00 GMT+00

ICRA 2021 RMDO Workshop – Up next

Up Next:

14:00 – 14:30	**Dmitry Berenson:** Learning Where to Trust Unreliable Models for Deformable Object Manipulation
14:30 – 15:00	**Wenzhen Yuan:** Estimating object hardness with high-resolution tactile sensing
15:00 – 15:45	**Spotlight talks #2**
15:45 – 16:00	Coffee break
16:00 – 16:30	**Dinesh Manocha:** Learning based Methods for High-DOF Grasping
16:30 – 17:00	**Jeannette Bohg:** Bridging Topology and Geometry Using Reinforcement Learning
17:00 – 17:45	Open discussion round
17: 45– 18:00	Closing remarks



Dmitry Berenson

Associate Professor
Robotics Institute
Electrical Engineering and Computer Science Dept.

University of Michigan, USA

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https://deformable-workshop.github.io/icra2021/

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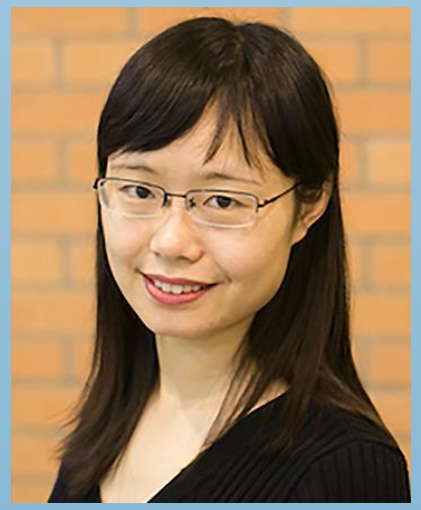

Wenzhen Yuan

Assistant professor in the Robotics Insititute (RI)

Carnegie Mellon University, USA

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1. **R. A. Laezza**, R. Gieselmann, F. T. Pokorny, Y. Karayiannidis - Presenting ReForm, a Robot Learning Sandbox for Deformable Linear Object Manipulation
2. **P. Perrusi**, A. Cazzaniga, P. Baksic, E. Tagliabue, E. De Momi, H. Courtecuisse - Learning robotic needle steering from inverse finite element simulations
3. **X. Ma**, D. Hsu, W. S. Lee - Learning Latent Graph Dynamics for Deformable Object Manipulation
4. **M. Dorostian**, A. Moradmand, P. Chang, T. Padir - Deformable Objects Manipulation Using Model Adaptation Techniques
5. **A. Longhini**, M. Moletta, M. C. Welle, I. Mitsioni, D. Kragic - Perceiving and handling textiles: a robotics perspective
6. **S. Dittus**, B. Alt, A. Hermann, D. Katic, R. Jäkel, J. Fleischer - Localization and Tracking of User-Defined Points on Deformable Objects for Robotic Manipulation

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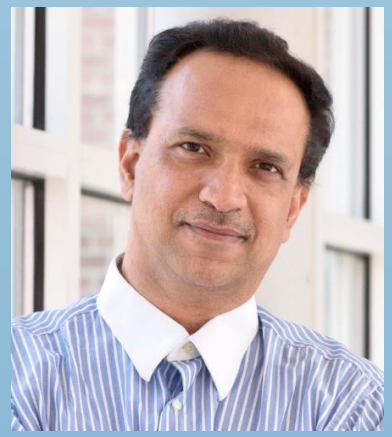

Dinesh Manocha

Paul Chrisman Iribe Professor of Computer Science,

Professor of Electrical and Computer Engineering

Department of Computer Science University of Maryland, USA

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Jeannette Bohg
Assistant Professor for Robotics
Stanford University, USA

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Participants:
- Dmitry Berenson
- Wenzhen Yuan
- Dinesh Manocha
- Jeannette Bohg
- Rika Antonova

Discussion topics:
Simulation and transfer to reality: can we leverage simulators for real-world applications?

Method evaluation: how could we compare different approaches on deformable objects?

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ICRA 2021 RMDO Workshop – How to interact

Zoom Q&A:
https://kth-se.zoom.us/j/65541817487

Slido #267619:
https://app.sli.do/event/kodmfrnf

YouTube chat:
https://www.youtube.com/channel/UCQFAnfbQK45enYDr8B0VdKw

ICRA 2021 RMDO Workshop – Material

Missed a talk or want to read the accepted extended abstracts?

All talks and contributions will be/are available on the workshop website:

https://deformable-workshop.github.io/icra2021/