



Project Proposal

Video-based Cloth Parameter Estimation

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Background & Motivation

- Cloth Simulation
 - Realism in CG scenes
- Fashion industry, Virtual try-on



Goal

Video-based Cloth Parameter Estimation



Bhat, Kiran S., et al. "Estimating cloth simulation parameters from video." Proceedings of the 2003 ACM SIGGRAPH/Eurographics symposium on Computer animation. Eurographics Association, 2003.

Machine-Learning-Based Cloth Material Retrieval in Real-Life Videos



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Goal

Video-based Cloth Parameter Estimation

- not only considering material
- Cloth movement vs. Garment movement
- Human motion



Milestone

- Machine-Learning-Based Cloth Material Retrieval in Real-Life Videos:
 - Oct.: Collect real-life cloth moving videos. Have a sample of it ready
 - Oct.: Write an optical flow algorithm for generating features of real-life videos
 - Oct.: Run testing on the real-life videos
- Extension: Garment movement:
 - Nov.: Generate synthetic dataset for garment movement
 - Nov.-Dec.: Do clustering on the motion subspace for the garment movement
 - Dec.: Testing and Comparison



→ Mid-term Milestone

→ Final-term Milestone



Thank you.



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