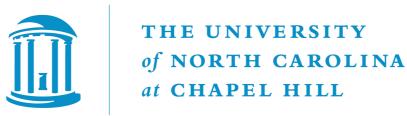


## Project Proposal

Video-based Cloth Parameter Estimation

Zhen Wei



## Background & Motivation

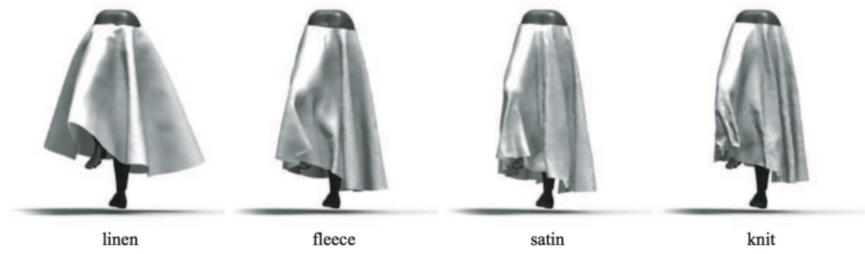
- Cloth Simulation
  - Realism in CG scenes Fashion industry, Virtual try-on





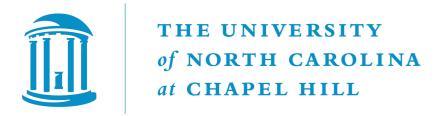
#### Goal

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

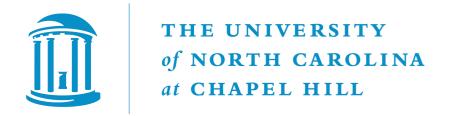


### Goal

#### 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









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# Thank you.