

Creative Interfaces CSC490 Winter 2014

Karan Singh



Course web site:

http://www.dgp.toronto.edu/~karan/courses/csc490/winter_2014/

Instructor: Karan Singh

Office: BA 5258

Phone: 978-7201

Email: karan@dgp.toronto.edu

Office Hours: open door or by appointment

Creative communication

The transformation of a creative vision into a digital reality, that is easy to refine and reuse.

Creative communication

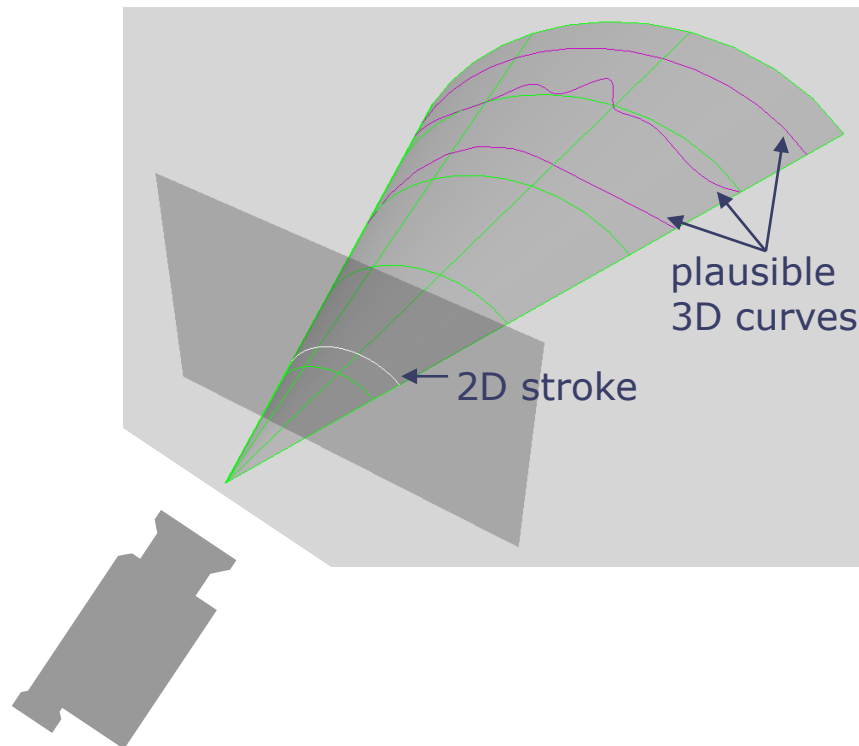
Why is it important?



Humans have an audio IN and OUT,
a video IN but no explicit video OUT!

Video OUT: sketching

Inferring 3D shape from 2D input and display is ambiguous.



I ♥ SKETCH



[**Bae, Balakrishnan & Singh**, ILoveSketch: As-natural-as-possible sketching system for creating 3D curve models. *UIST 2008*]
www.ilovesketch.com

CrossShade: special planar curves?



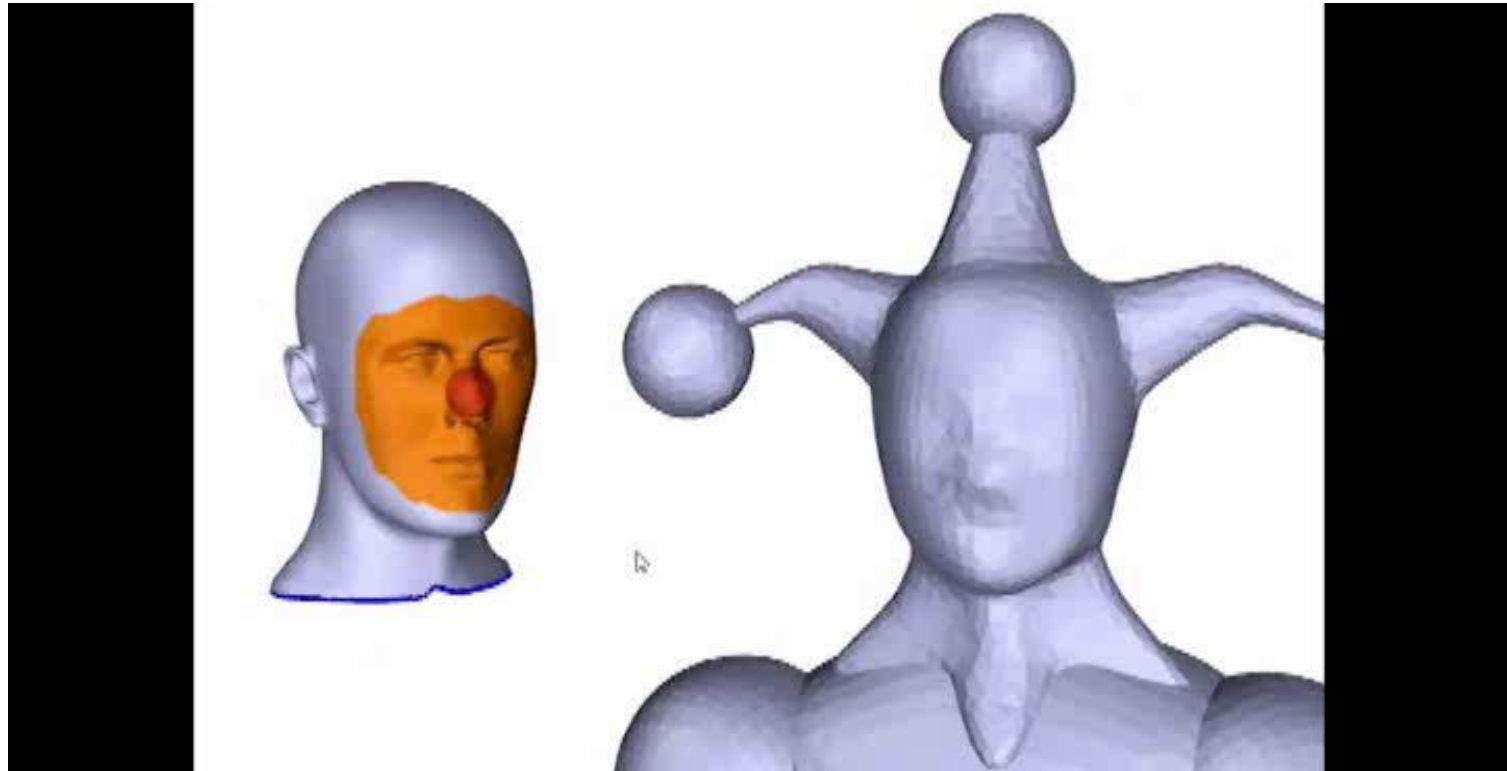
CrossShade: special planar curves?



[**Shao, Bousseau, Sheffer, Singh**, CrossShade: Shading Concept Sketches Using Cross-Section Curves *SIGGRAPH 2012*]

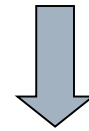
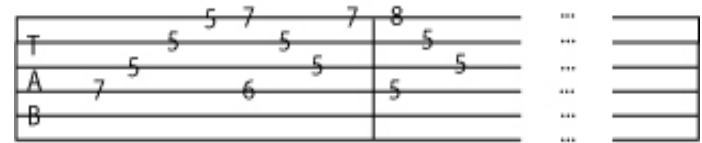
<http://www.crossshade.com/>

Video OUT: sculpting



[**Schmidt, Singh**, MeshMixer *SIGGRAPH 2010 talks*]
<http://www.meshmixer.com> (acquired by Autodesk Inc.)

Handrix



Drive



FingerWalking



[Lockwood and Singh] Finger Walking: Motion Editing with Contact-Based Hand Performance SCA 2012.

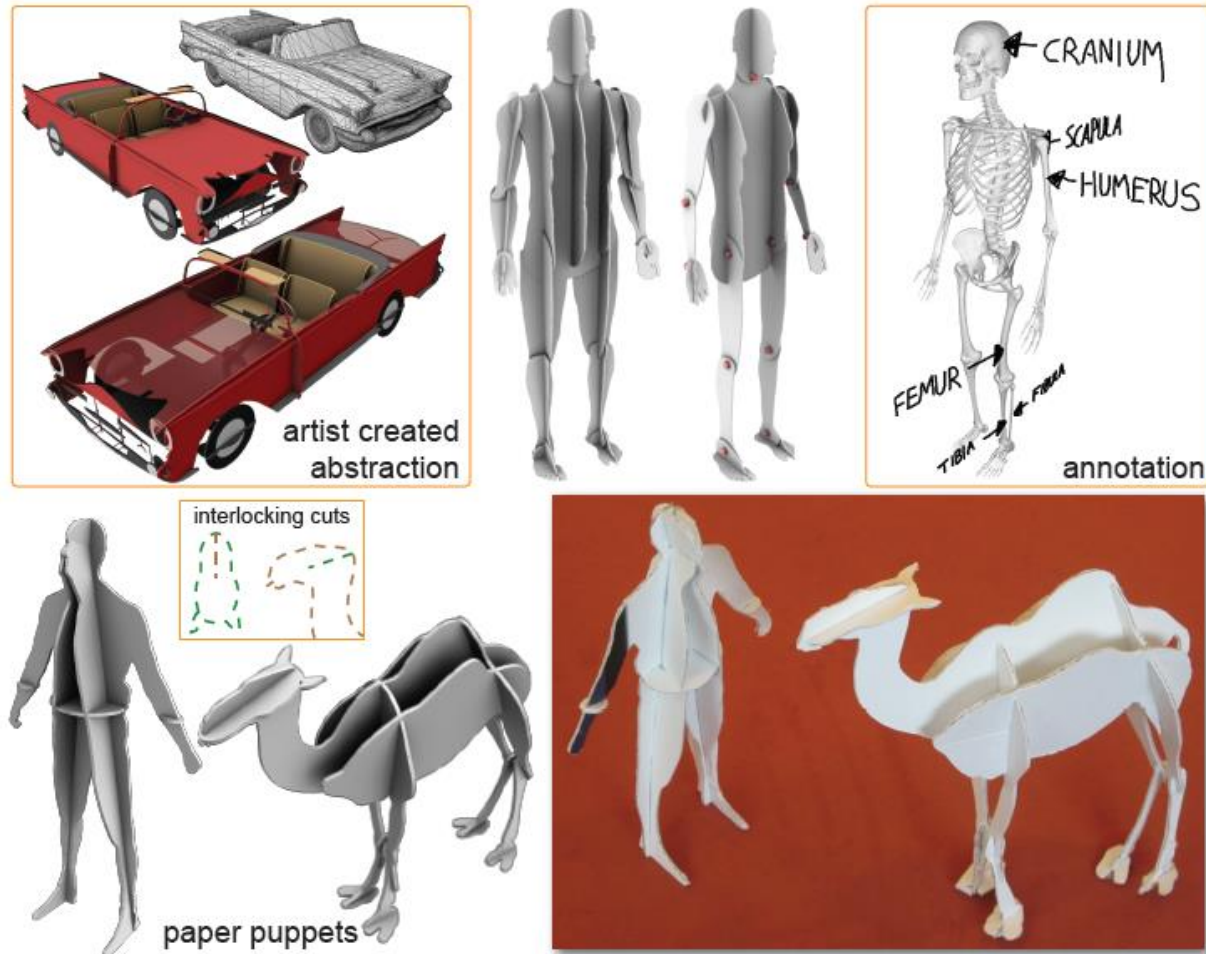
FingerWalking



Projects

- Studying stroke interfaces: gestures, creation, recognition.
- Perception of line-drawings, gestural interfaces.
- Ergonomics of input.
- Authoring animation/video.
- Understanding Pose.

Assignment (planar cuts)



Slices

http://www.dgp.toronto.edu/~mccrae/projects/misc/PlanarDisc_2014_01_07.zip

http://www.dgp.toronto.edu/~mccrae/projects/misc/planardisc_instructions.mp4

http://www.dgp.toronto.edu/~mccrae/projects/misc/planardisc_instructions.txt

Sketching Planar Section Representations

Submission #2259

CHI 2014