# Sketch-based Modeling with Few Strokes

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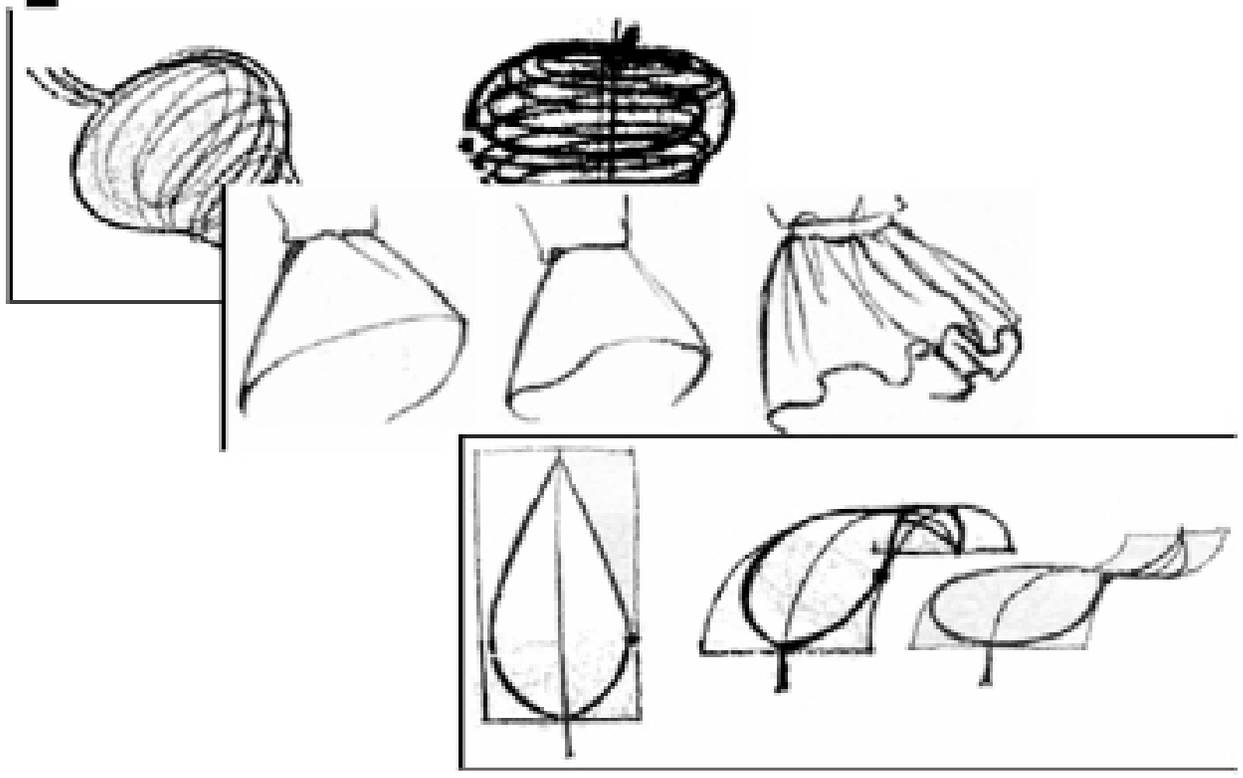
## Intro

- A sketch-based system for the interactive modeling of a variety of free-form 3D objects using a few strokes.
- Uses two parametric surfaces for creation of models
- Uses orthogonal deformation and cross sectional oversketching for editing.

## Traditional hand-drawn techniques



## Previous work

- Three categories
  - Extrusion-based system like Sketch and Quick-Sketch
  - Blob editing systems like Teddy and BlobMaker
  - Reconstruction-based systems which are based on templates
- This system can generate a large variety of 3D parametric surface objects with curved and creased features with few strokes and simple interactions.

## The details of the system

- Stroke Capture
  - Converted into parametric form
  - Use a B-Spline curve
    - Reverse Chaikin Subdivision
- Creation phase
- Editing phase

## The details of the system

- Stroke Capture
- Creation phase
  - Rotational Blending Surface
  - Cross Sectional Blending Surfaces
- Editing phase