ReFab

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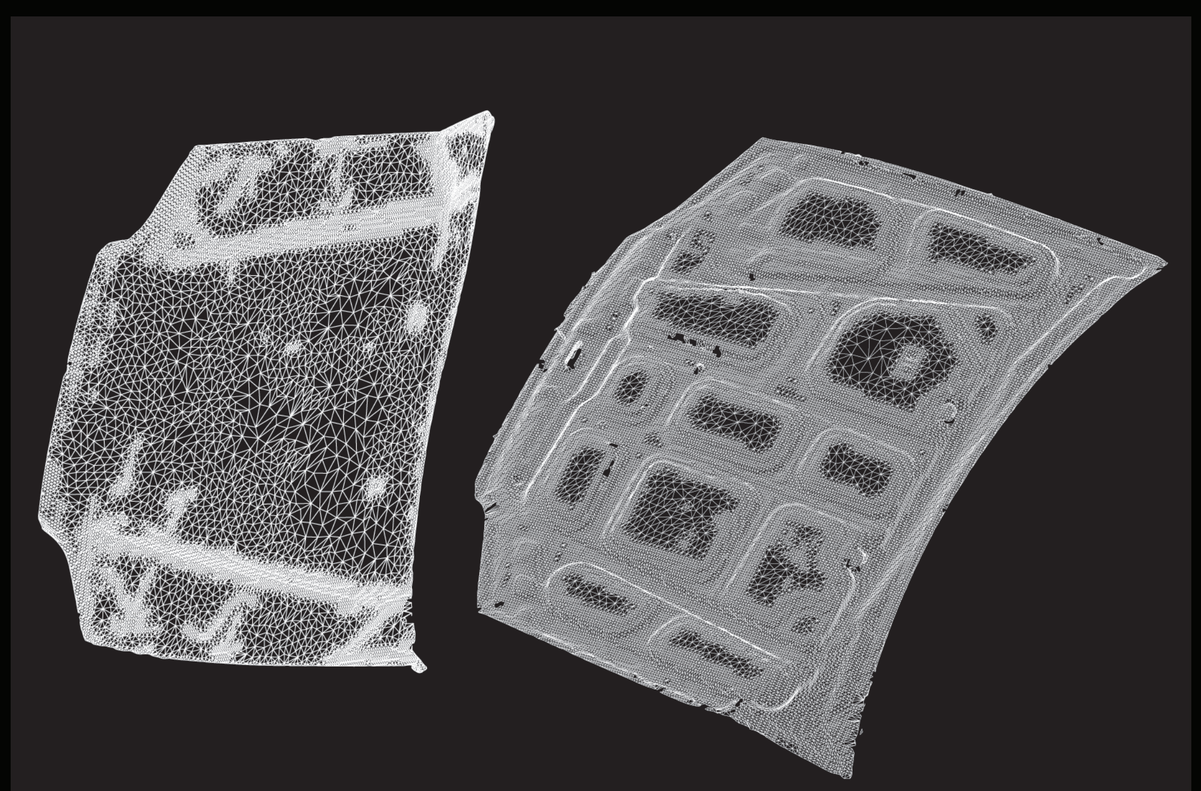
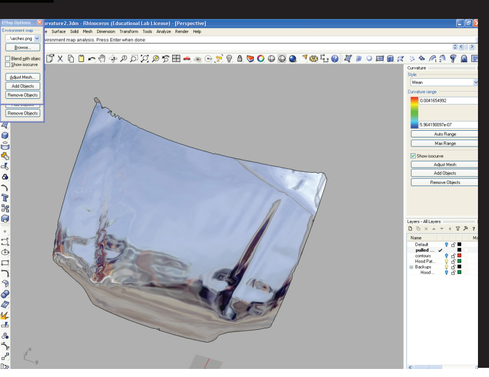
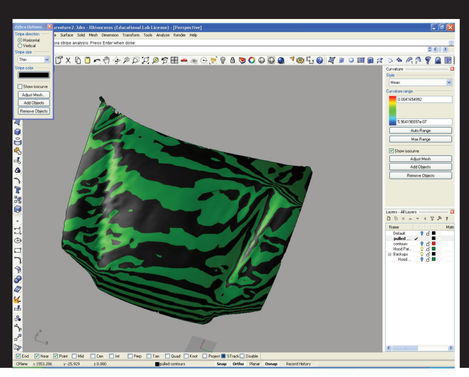
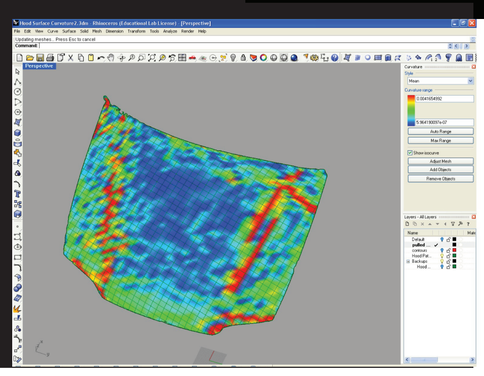
Digital Investigation



Dots were applied to surface of hood and scanned using a 3D digitizer. These points were then connected in a 3D modeling program to create a wireframe mesh. (shown to the left)



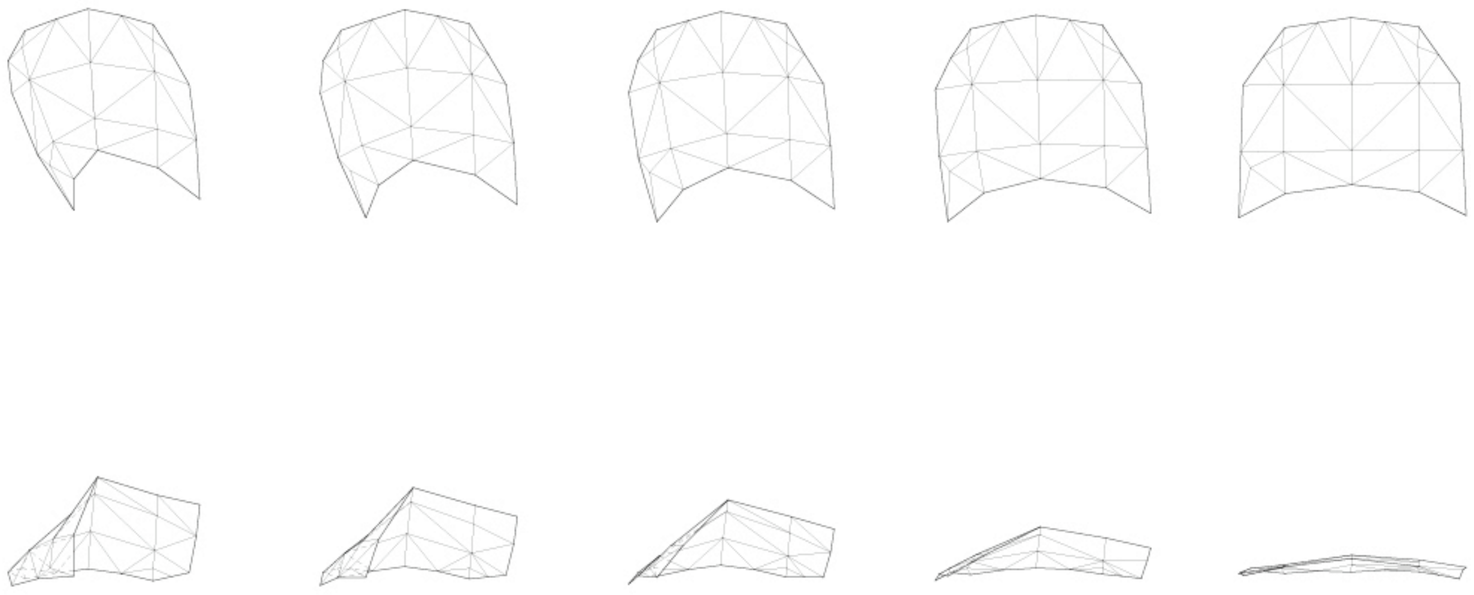


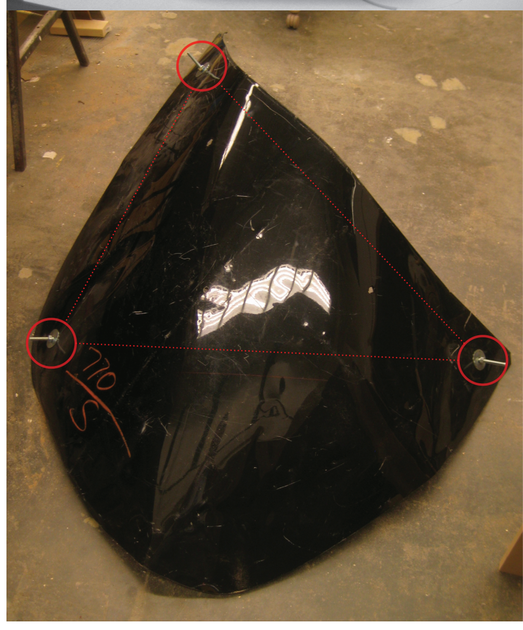


Images to the left are screenshots taken from Rhino 4 3-D modeling program. An analysis was performed to examin surface curvatiture. Each type indicates one way and two way curviture through coloration and geometrical mapping.

(Right)
Physical hood was simplified to tri-angulated surface. This surface was digitized, then fabricated by laser cutting polystyrene. This scale mod-el mimics the motion tendencies of the original physical hood.

BEHAVIORAL MODELING - 5 STAGES OF BENDING





(Right)
Location of bolts indicate points of triangle used to translate phyiscal hood into digital modeling software.

SHADING STUDY - HOOD TESSELLATION WITH GRADUATED BENDING