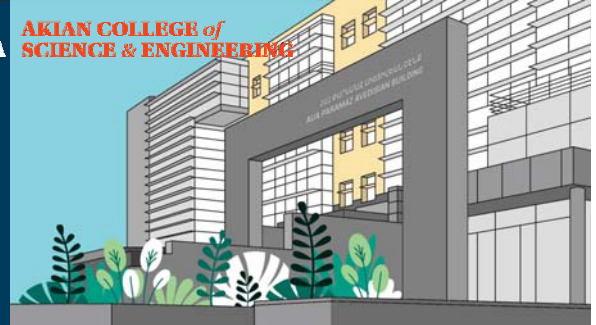


# Modeling and Manufacturing of Human Face Using Scanned Image

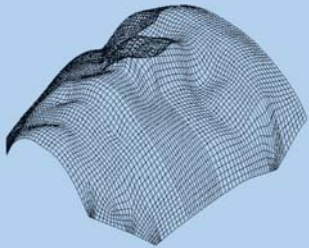
Authors: CAM class of 2005

Akian College of Science and Engineering

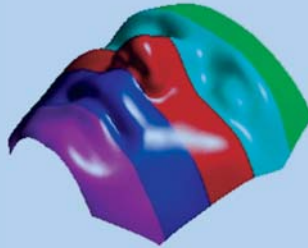
Software: SURFCAM Year: 2005



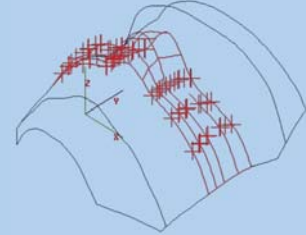
## Step by Step Description of the Project



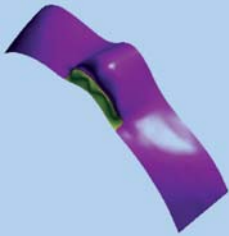
STEP 1: We used an IGS file of a scanned human face downloaded from the Internet and imported into SURFCAM as a surface model.



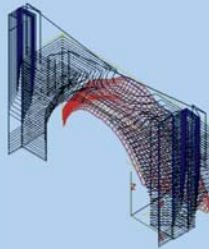
STEP 2: The instructor split the face into five sections to assign each of them to a team of three students.



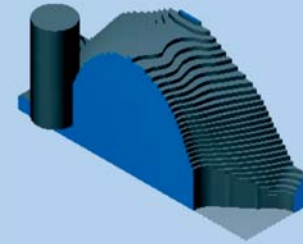
STEP 3: Before assigning the segments to the teams, the instructor created a point cloud for each segment and deleted surfaces. This made the task more challenging - the teams should have restored the surfaces of the segments first. The nose segment is shown in the picture.



STEP 4: The teams created the surface models of the assigned segments. The nose segment is shown in the picture.



STEP 5: The next task was generating machining tool-paths using the reference surface models. The chin segment is shown in the picture.



STEP 6: After verifying the machining process, the teams generated the numerical control programs. The chin segment is shown in the picture.



STEP 7: Machining process of the segments

## The Result: Segments One By One and in The Assembly

