

Skull Reconstruction Tools

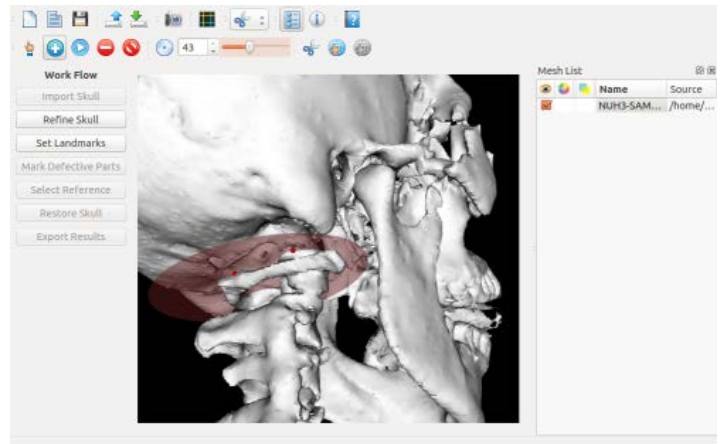
Human skulls are very important target objects in craniofacial surgery planning and implement design, forensic investigation and physical anthropological studies. They can be defective due to traffic and work accident, violence, congenital deformity, tumor or other natural processes. Reconstructing non-defective models from defective skulls are crucial in providing a normal reference for craniofacial surgery and implement design, identification of victims in forensic investigation, and the study of physical shape of hominid skulls.

NUS Skull Reconstruction tools provide a robust, accurate and efficient method for reconstructing non-defective skull models from input defective skulls. The tools can work with CT scans of patients' skulls as well as 3D skull models.



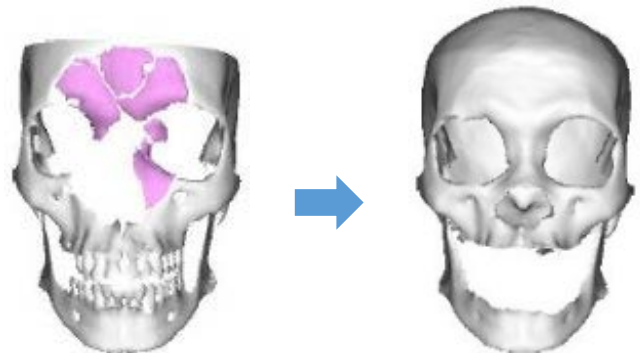
Features

- Segmentation and construction of 3D skull models from CT scans.
- Removal of non-essential parts such as the spine.
- Placement of landmarks.
- Selection of reference model for reconstruction.
- Robust, accurate and efficient skull reconstruction algorithm.



Applications

- Craniofacial surgery planning.
- Implement design.
- Forensic reconstruction.
- Reconstruction for anthropological studies



Benefits

- Save time in skull reconstruction.
- Produce accurately reconstructed non-defective skulls.
- Improve craniofacial surgery outcome.
- Facilitate forensic investigation and anthropological studies.

