Improved geometry surface matching via texture features

Jason Zhang, Jian Jiang, Daniel Guo

Pipeline

Mesh

Ricci Flow

Circle Packing
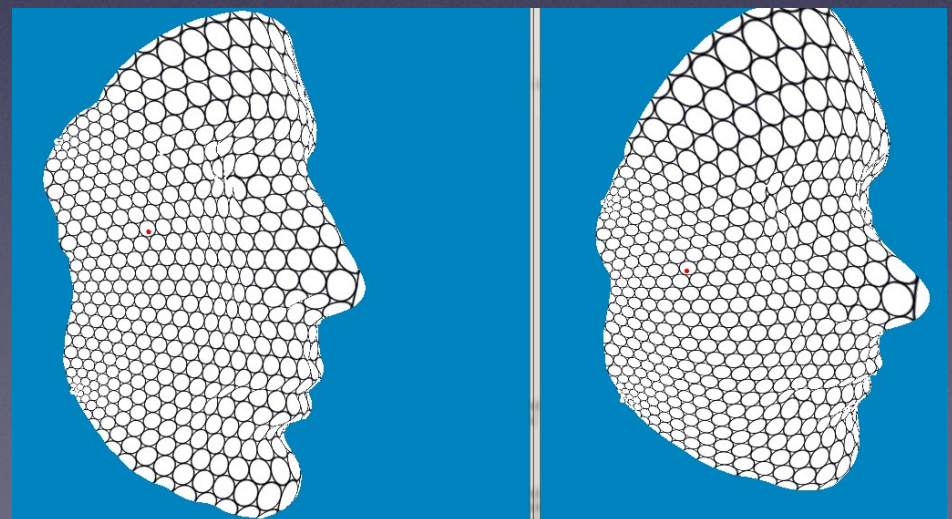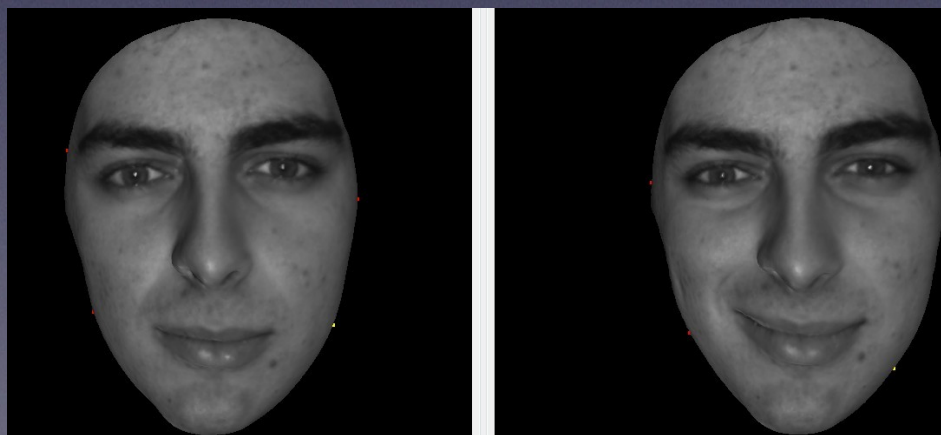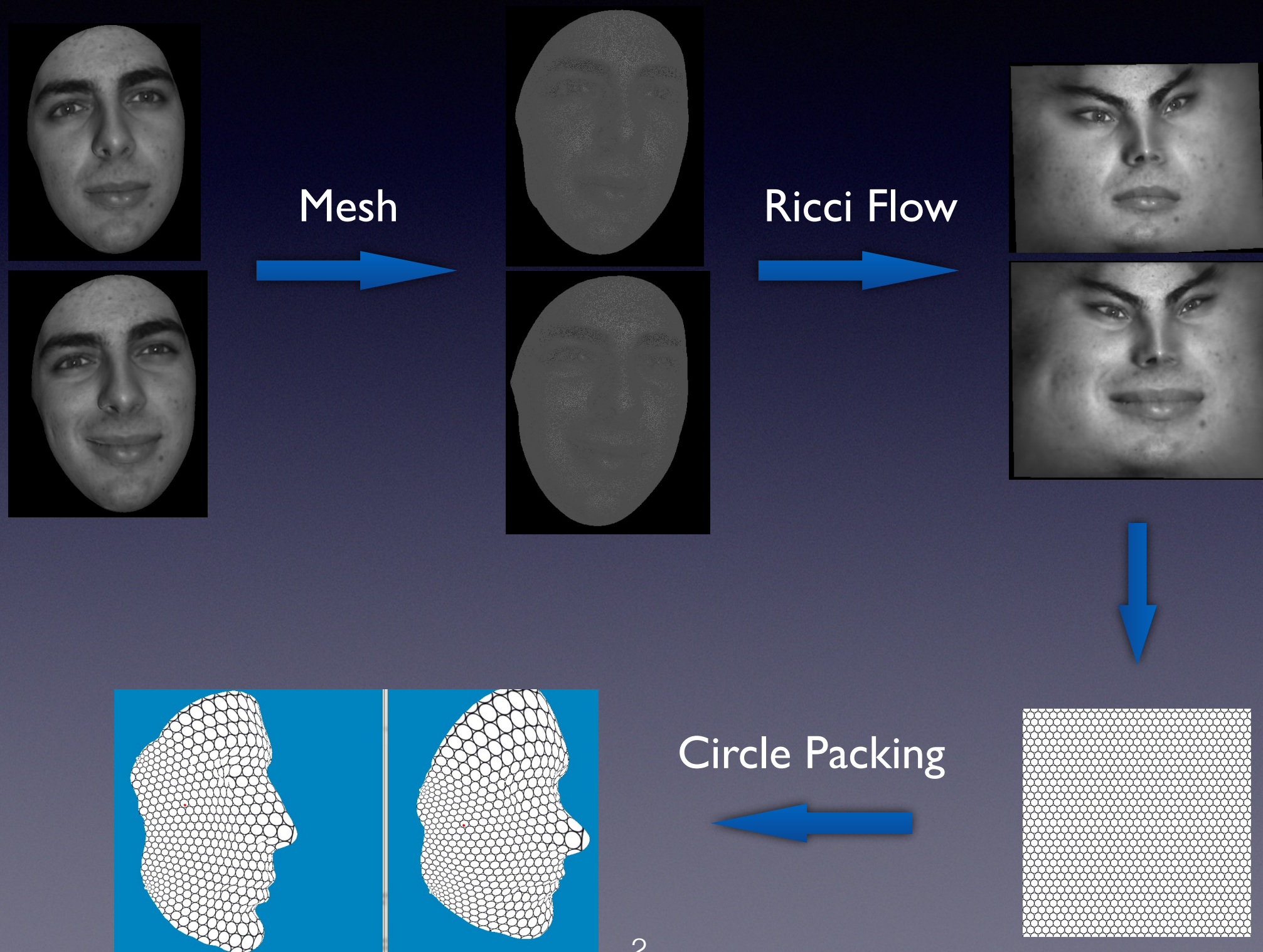
- Previous Work:
  Mesh and computational topology tool for example Ricci Flow, conformal mapping

- Improvement:
  Add texture information to increase the accuracy. For example, rigid image matching or non-rigid image matching

- Algorithms Tool: MRF MAP

[1]: Unifying maximum likelihood approaches in medical image registration, International Journal of Imaging Systems and Technology
[2]:Efficient MRF deformation model for non-rigid image matching

Work Progress

- 3D data. Individual's different expressions

- Geometry process, finished.

- Building Non-rigid image matching model