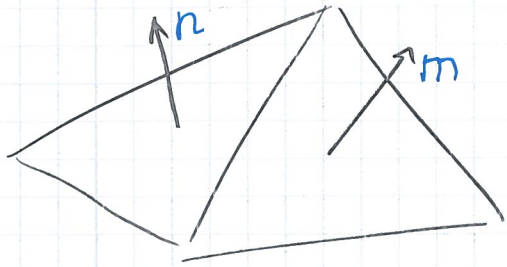
Smoothness energy

the idea is to ensure that the model looks smooth.

This is done by matching the normals of the specified convtriangle blocks.



$$f = n - m$$

Problem:

this energy causes the radii of palm centers to become more similar. ie. smaller

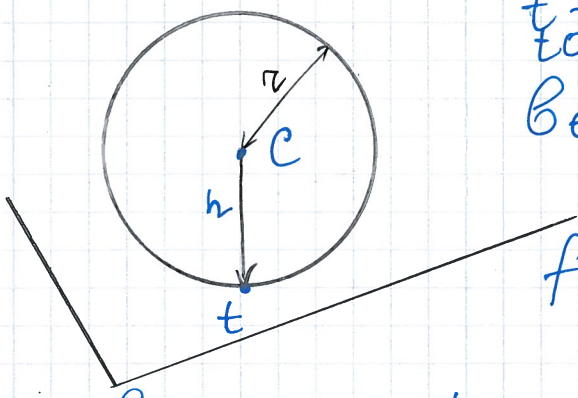
⇓

the finger basis start sticking out from back side of the hand

⇓

tried to remedy this with ↓

Tangency energy



t - point of tangency to the plane, can be outside of the convtriangle face

$$f = t - c - r \cdot h$$

this can be generalized to consegments and spheres

$$f = q - c - r \cdot h$$

however, during the optimization, the projection q can jump to different locations, including other side of a block or even another block ⇒ this energy needs to be modified