## TPA 8: Specularity estimation from frontal face image

## August 21, 2012

**Problem Statement:** Estimate the surface reflectance parameter  $(\rho)$ , for all points on the surface of a face.

**Input:** Input to the system are the following

- A set of input image samples, with pure frontal pose, and light sources with known illumination directions. These belong to any particular subjects.
- Later the same should be tried with different subject samples.
- Subjects with beards or specs will not be processed.

Expected Output: The developed code should be able to do the following

•  $\rho(x,y)$  for a subject, with the same resolution as the input image.

## Challenges

- When skin color varies, how do you compensate or counter this.
- Face may have mild variations may need to register prior to processing

## Reference

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