

**CS 423 Computer Graphics**  
**Assignment #1 Handout**  
**Due: Sunday, March 2, 2025 @ 11:00pm.**

**Synthetic Lighting for Photography**

Interesting manipulations can now be done...

- Subtract ambient to find contribution of each light source
- Change color of lights
- Negative lights!

$$I_t = wI_a + (1-w)I_b$$

For example, if  $w$  is varied at intervals of 0.1, then the sequence of 10 images is

$$I_t 01 = 0.0*I_a + 1.0*I_b$$

$$I_t 02 = 0.1*I_a + 0.9*I_b$$

...

$$I_t 10 = 1.0*I_a + 0.0*I_b$$