Edges

Computer Vision I
CSE252A
Lecture 10

Physical causes of edges
1. Object boundaries
2. Surface normal discontinuities
3. Reflectance (albedo) discontinuities
4. Lighting discontinuities

Object Boundaries

Surface normal discontinuities

Boundaries of materials properties

Boundaries of lighting
Edge is Where Change Occurs

1-D

- Change is measured by derivative in 1D
  - Biggest change, derivative has maximum magnitude
  - Or 2nd derivative is zero.