## Snitzer Photography Shooting in Dark Places

Not a science experiment

• Depict life at night (people, emotions, story telling)

Equipment

- DSLR or mirror-less camera with ability to modify light triangle (ISO, Shutter speed, Aperture)
- Tripod: Ex. Slik Sprint Pro II. \$90, ball head, 2 lbs. (why better than pan head). Manfrotto or Oben for mid-priced (\$150-250) heavier duty. Gitzo or Real Right Stuff for "top of the line" (\$ mortgage your home).
- Shutter release
- Flashlight: can't see camera controls in the dark!

Basic settings

- Shoot RAW (better post processing-ability to recover over/under exposed area, 3-4 stops more dynamic range).
- Mirror lock up option engaged
- Beginner: Start shooting in Aperture Priority
  - Higher ISO 800-1600+ allows faster shutter speeds to freeze action or allows smaller aperture for greater depth of field. Depth of field dependent on focal length (wide vs tele).
  - Low ISO 100-400 allows longer exposures for blurring action/making pedestrians disappear. Increases dynamic range (HDR but better!)
  - Use exposure compensation to adjust/tweak exposure after reviewing screen capture of photo.
- Advanced
  - $\circ$   $\;$  Shoot manual mode for greater control.
  - Use histogram after test shot to fine tune exposure. Try to target the lightest tones so they clip histogram right by 1.5 stops. In camera histogram JPEG images has 1.5-2 stops less dynamic range to the right than actual RAW image.
  - Low ISO has greater dynamic range. Ex. Nikon 810 gains 4 stops of range when ISO goes from 800 to 65 (equivalent of HDR?)
  - Shots greater than 30 secs will require you to go from manual setting to "bulb" setting.
  - Try bracketing your shots...experiment.

## Case Study I: Atlanta



Case Study II: Michigan Shore



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- Also Twilight slightly ISO (200)
- F5/40mm for good depth of field
- 2 secs

Twilight allows lower ISO (200)

• Interesting perspective

F6.3/11mm provides large depth of field

1/5<sup>th</sup> second (no moving objects to freeze)

Wide angle and taking 2 ft off the ground

Case Study III: Grinderwald, Switzerland



- End of twilight ISO 400
- F10/20mm
- smaller ap:for depth of field
- 2 secs

## Case Study IV: Las Vegas



Case Study V: Las Vegas



- ISO of 400
- F5.6/17mm:
- bal depth of field with freezing action
- 1/30th of second
- Wide angle/low angle of view.

- ISO 200
- F4.5
- 2/5<sup>th</sup> sec (partial blur pedestrians)

Case Study V: Las Vegas



- ISO 200: longer exposure
- Blur tail lights
- F7.1
- 1.3 secs

## Case Study VI: Nashville



- ISO 2000 to stop action
- F4

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1/250 second

Case Study VII: Train Concert



- ISO 1600 to stop action
- F4
- 1/160 second