CSSE463: Image Recognition Day 20

- Announcements:
  - Sunset detector due Weds. 11:59
  - Literature reviews due Sunday night 11:59

- Today: Lab for sunset detector
- Next week:
  - Monday: k-means
  - Tuesday: sunset detector lab
  - Thursday: template-matching
  - Friday: k-means lab

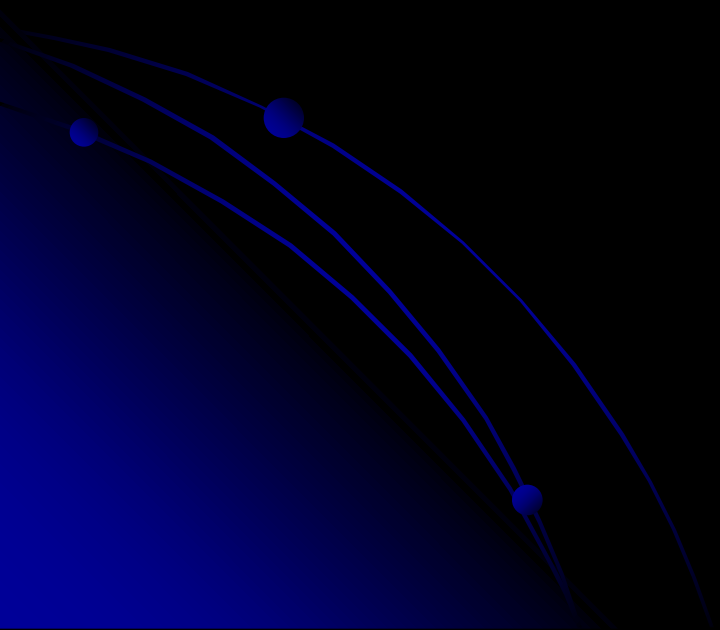
Term Project Teams

1. Photo Mosaic: Ali A, Joe L. Marina K, Daniel N.
2. Where's Waldo?: Ryohei S, Brandon K, Eric V
3. Stereoscopic Image Depth Mapping: Eric H, Nick K, Laura M, James S
4. Object Tracker: Franklin T, Kyle C, Mike E, Kyle A
5. Detection of Cancer in Brain Scans: Trey C, Nicole R, Katy Y, Maisey T
6. IGVC Vision: Donnie Q, Anders S, Ruffin W, Kurtis Z
7. Paint by Numbers Generator: Ann S, Katie G, Seth T
8. Next Chess Move: Robert W, Andrew M, Eduardo B

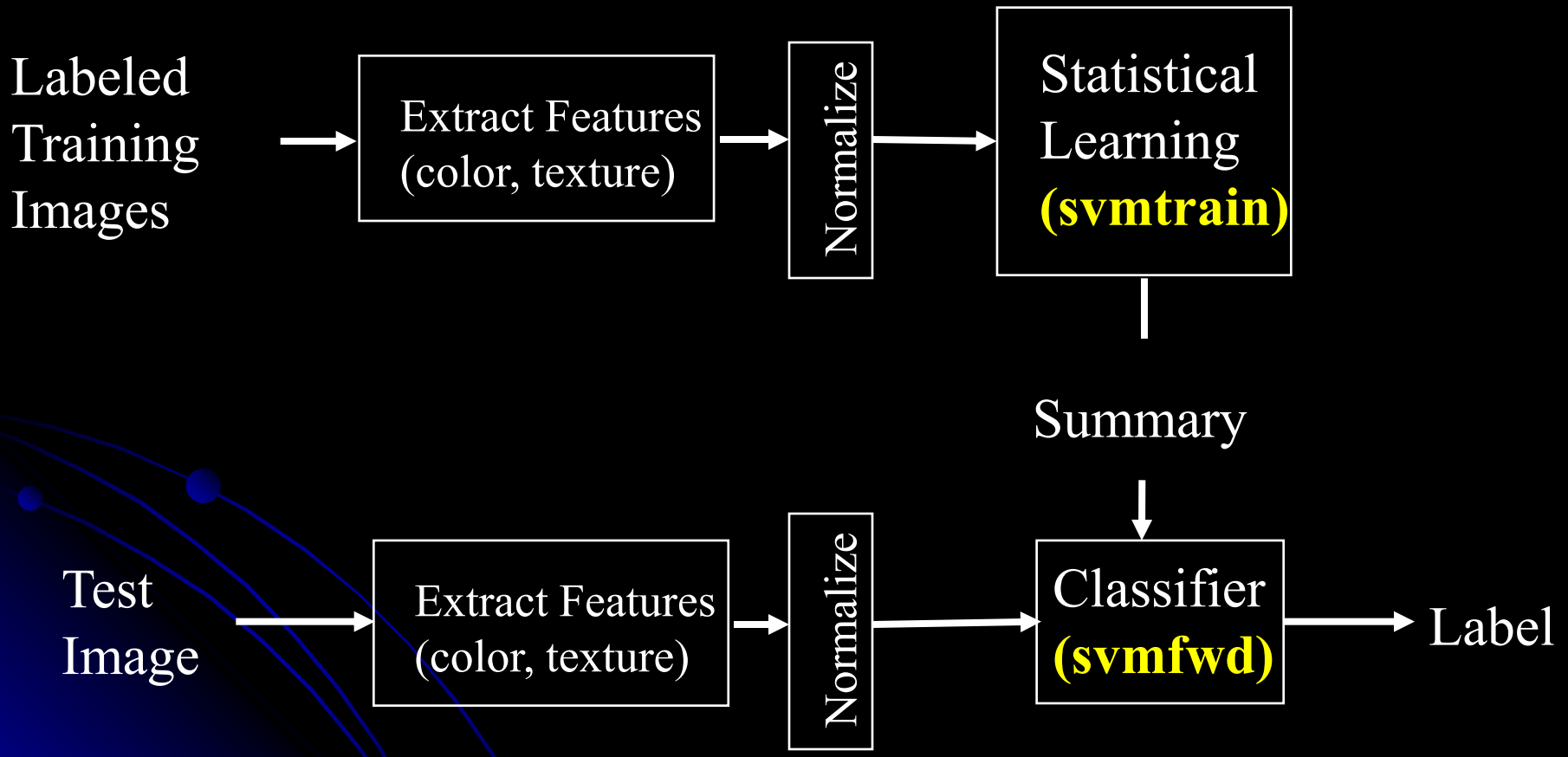
Term project next steps

- Read papers!
- Review what others have done.
  Don’t re-invent the wheel.
- Summarize your papers
- Due

Last words on neural nets



Common model of learning machines



Sunset detector addition

- Please email me a zip file of 10 images that you think would be tough to classify by Monday. I'll compile and send out.
- Best if the resolution is 384 x 256 (or slightly bigger, but don't change the aspect ratio as you rescale)

Sunset Process

- Loop over images
  - Extract features
- Normalize
- Split into train and test
- Save
- Loop over kernel params
  - Train
  - Test
  - Record accuracy
- For SVM with param giving best accuracy,
  - Generate ROC curve
  - Find good images
  - Do extension

- Write as you go!