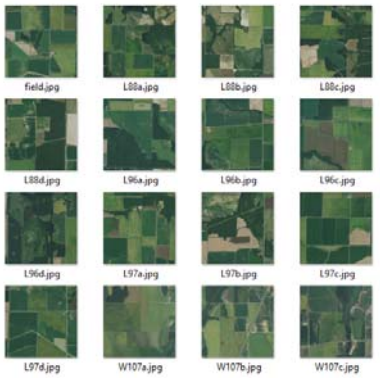
Project Options

1. Detect the roads and field boundaries
   - Note there are different line features, and many are not roads or field boundaries.
2. Segment crop fields
   - Woods and water ponds are not crop fields. But it is okay to treat them as if they are.
3. Extract line features (e.g., width, curvature, length, etc.)
   - Small line segments should be excluded, e.g., in the texture rich regions.
4. Extract features of closed region (e.g., texture, elongation, size, homogeneity, etc.)
   - A closed region has a boundary without gaps.

What are expected?

- A method that is not specific to one image
  - We have many images for evaluation
- Prepare good ground truth for evaluation
  - Usually manually annotate the images by more than one person and combine multiple annotations to eliminate subjectivity.
- A thorough evaluation of the method and good visualizations of the results
  - Visualization ideas: zoom-in view of exemplar regions, overlay the results to the original image, put ground truth and results to different color bands for a color-enhanced view.
  - Discuss the results from different aspects, for example, what are the success cases and failure cases.



Project plan

1. Problem statement
State what project you want to work on.

2. Data used
State the data to be used in this project

3. Method
Describe your ideas of a possible method

4. Evaluation
State how you plan to evaluate the method

5. Timeline
Tasks (or components) of the project and when they will be completed.

Project report

1. Problem statement
State what project you want to work on.

2. Data used
State the data to be used in this project including the ground truth.

3. Method
Give details of the method. Present how ground truth is created and any parameters used

4. Evaluation
State the evaluation metric, illustrate exemplar cases, and discuss quantitative and qualitative results

Project presentations

- Include the following in the project updates
  - The goal of this project (10%)
  - The timeline of the project (10%)
  - What have been completed according to the timeline (15%)
  - The results and the open issues, if any. (10%)
- Include the following in the final project presentation
  - An overview of the project goal
  - A concise summary of the method
  - Discussion of the results (cases you want to brag about and cases you wish do not exist)
  - A demonstration of the program

Key dates

- Sept. 8: Project kick-off
- Sept. 27: Project plan
- Sept. 29: Project update
- Oct. 20: Project update
- Nov. 10: Project update
- Dec. 2: Project package (report and code)
- Dec. 6 and 8: Final presentation