

# CSCI 241: Data Structures

## **"Lecture" 0**

Introduction and Getting Things Rolling

# Today

1. Who is this instructor?
2. What is this course?
3. Meet your team
4. Syllabus:
  - As a class: Questions about the syllabus?
  - In teams: collaboratively answer syllabus questions.
  - As a class: Any remaining questions?
5. In teams: Review Problems

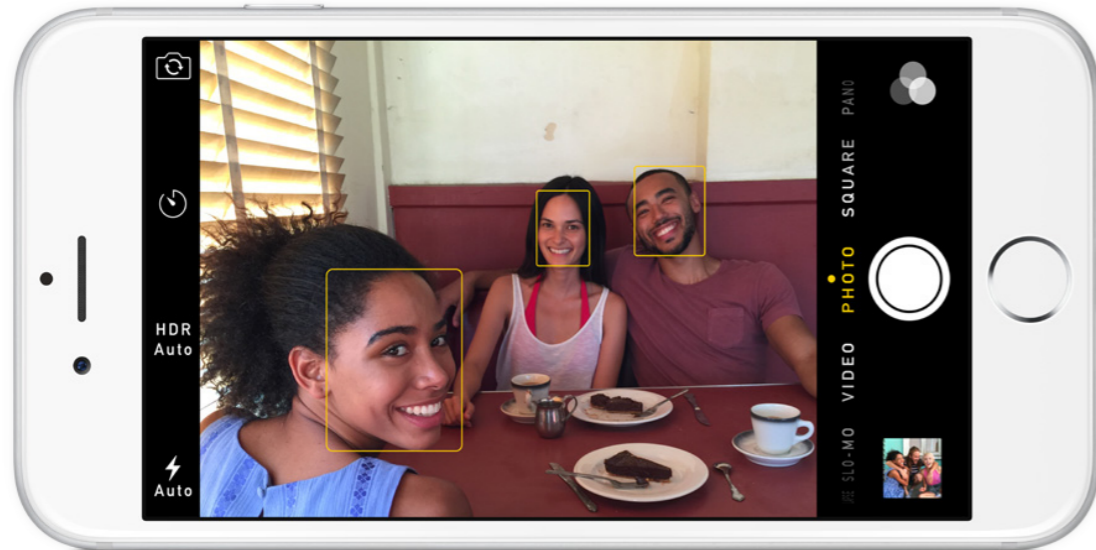
# About Me:

**Scott** Wehrwein

(call me this!)



# Computer Vision: Familiar Examples



In-Camera Face Detection



Autonomous Driving



Panorama Stitching



Image Search





# Some recent work...



Mad River Valley, Vermont 58°F  
65°F / 48°F  
Feels like: 93.0°F  
cloudy  
85% 1 mph  
October 1, 1:07 AM  
AccuWeather

westhillbb.com  
West Hill House B&B  
Warren, Vermont

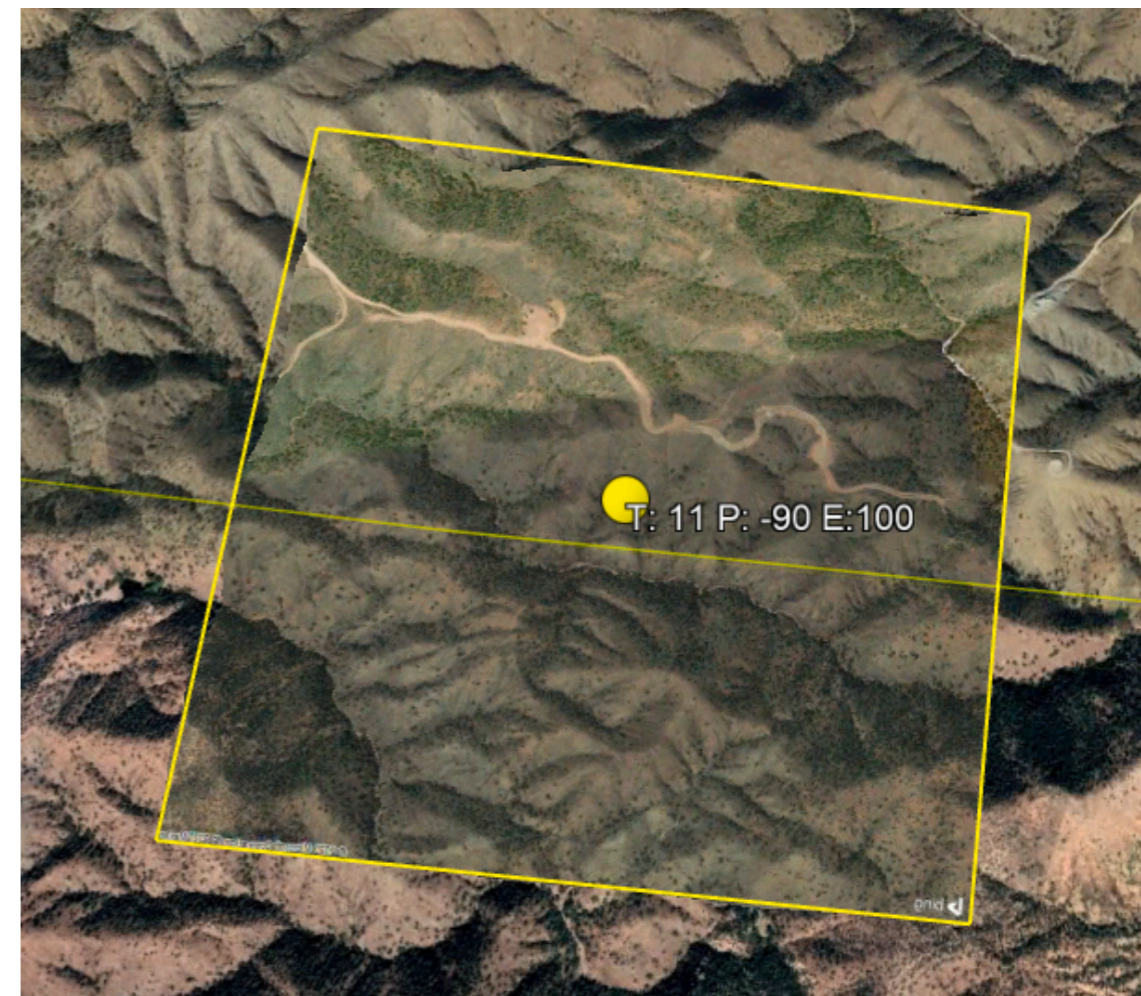
West Hill House B&B

# Overhead Imagery Analysis

Count birds!



Measure international border legibility!

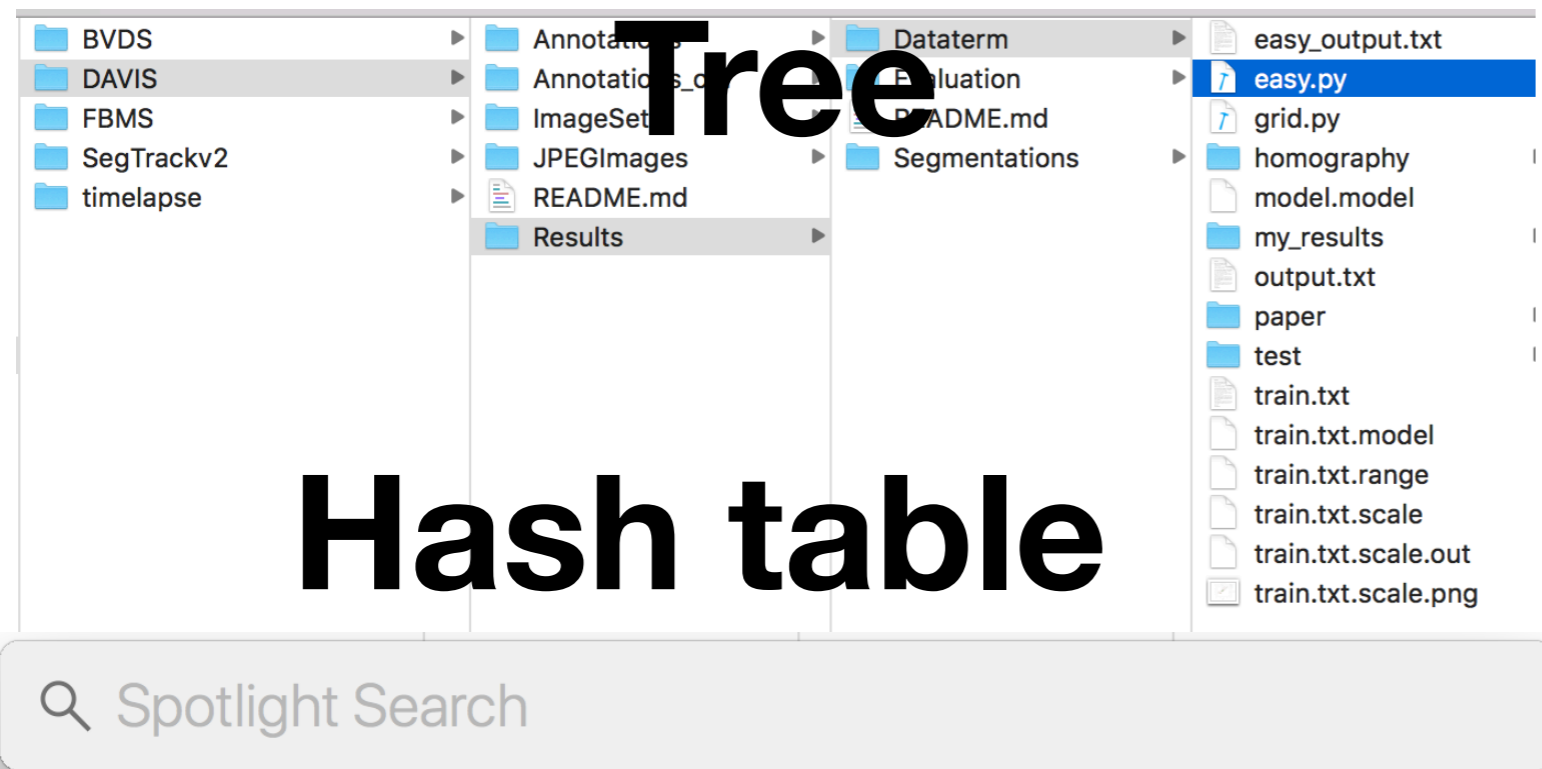




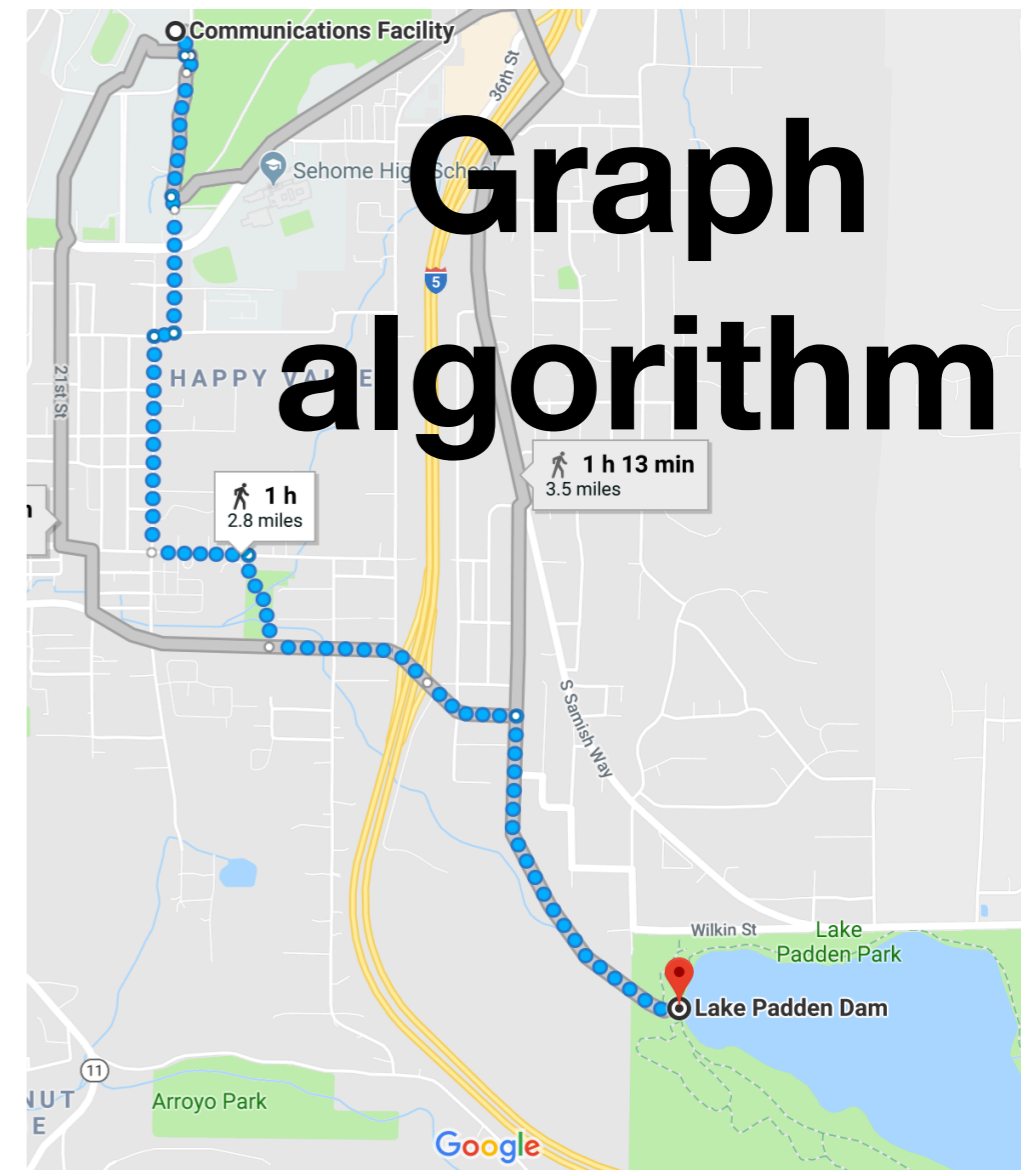
# Data Structures: Why?



**Graph**



**Hash table**



# Classroom Environment

- I expect everyone to take part in maintaining an inclusive and welcoming classroom environment.
- It's surprisingly easy to be exclusionary without meaning to.
- Please think carefully about how you conduct yourself and how your behavior may be perceived by others.

## **Professionalism**

I am committed to maintaining an inclusive, supportive, and professional environment in all academic settings including lectures, labs, and course-related online spaces. Students are expected to live up to the [ACM Code of Ethics and Professional Conduct](#). This is the ethical code adopted by nearly every software professional. Failing to follow the ACM Code of Ethics and Professional Conduct can negatively affect course grades up to and including a failing grade for the course. Conduct is also considered when determining admission to the major.

# Meet Your Team

- Fill out a name card that you will bring to class every day
- 5 minutes: introduce yourselves:
  - What are you excited about for this quarter (in or outside this course)?
  - Anything you're nervous about for this course?

# Team Assignments

# How this class runs

- Before class: watch videos, complete **Exercises** and submit to Canvas (individually)
- In class:
  - In teams: go over Exercise solutions, write a solution set and hand in
  - As a class: address any questions that came up
  - In teams: work through as many **Problems** as you have time for

# Syllabus: Questions?

The syllabus *is* the course webpage:

[https://facultyweb.cs.wvu.edu/~wehrwes/courses/csci241\\_23s](https://facultyweb.cs.wvu.edu/~wehrwes/courses/csci241_23s)

Also linked from the Syllabus page on Canvas.

# In Teams: Syllabus Questions

- In teams, collaboratively write up answers to Problems 1 - 4.
- If you finish, feel free to chat with your teammates; after about 4 minutes we'll come back together.

# Syllabus: Remaining Questions?

1. What are you required to do to prepare for each class?
2. Where can you find the lecture videos, slides, exercises, and problems?
3. How many missed classes are allowed without making arrangements with Scott?
4. What is a slip day, how many are you allowed, and how do you use one?



A plot (whiteboard)

# Review Problems

- Reconvene in teams and work on Problems 5 - 9.
- As will be typical for in-class Problems, these increase in challenge level, and you are not required to finish them all.

See you on Friday for L01!