

While waiting for class to start, chat with a neighbor:

- Name (pronouns optional)?
- Fun thing you did in JTerm?
- Class you are excited about (besides this one :))?



Keep the conversation going or turn to a new neighbor!

CS302 ALGORITHMS + COMPLEXITY

Learning Goals (Today)

- Define Algorithms
- Introduce Course Structure

Announcements

- Office Hours (OH) Mon 2-3:30, Thurs. 3:30-4:30, Fri 11-12
- Upcoming Assignments:
 - Due Today: Getting to know you survey
 - OH Meet + Greet Sign-up
 - Syllabus Discussion
- Due Sun: PSet 1 Rough Draft
- Course Assistant Drop-in Hours TBD
- Lecture notes, video
- Weekly schedule only accessible to our class
- Summer research
- Friday 12:30, CCI alumni talk on ML for biotracking (Handshake)

Algorithm def: A finite, clearly defined sequence of instructions for carrying out a task. (Learned 1XX, 201, 202, etc)

This class: Sophisticated techniques for creating fast algorithms

Plan for Semester

Frameworks:
Paradigms

Divide +
Conquer

Greedy

Dynamic
Programming

Tasks:

Describe
(pseudocode/java)

Prove
correctness

Analyze
runtime

Consider
Ethics of
implementations

+ NP-completeness (comparing difficulty of problems)

Learning goals: go/cs302

Learning

When you fail/make a mistake...

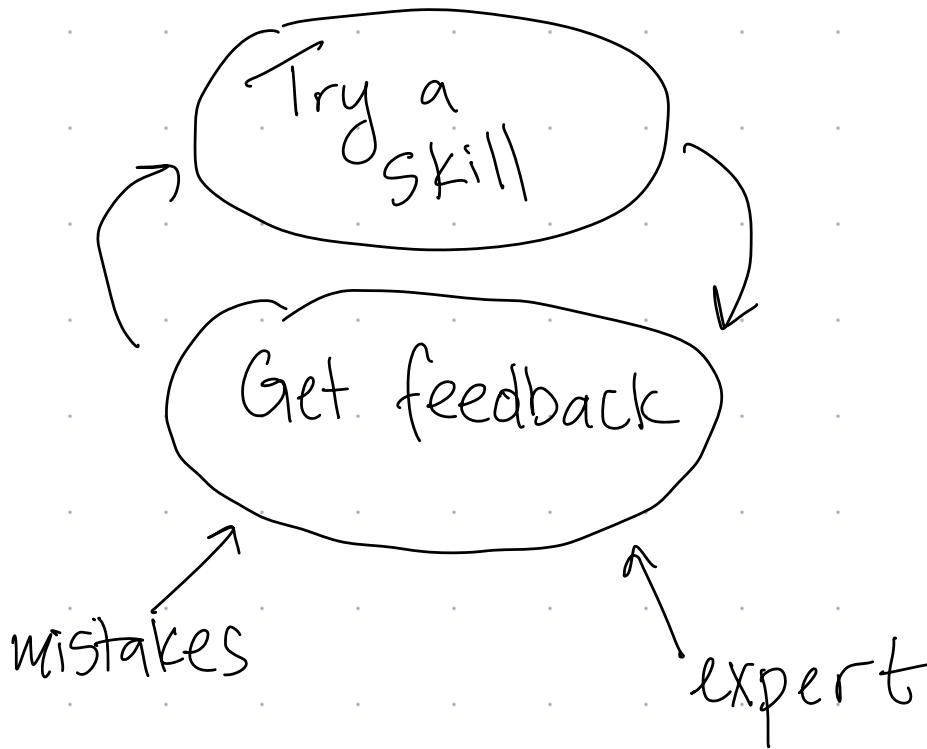
What helps you get excited to get back up + try again?

(Try to give a specific example from your life)

↙ ↓ ↓ ↓
Sports, social, academics, art

- ① Share with neighbor
- ② Put nugget of wisdom on board

Learning



- PSets for effort
- Reattempts to demonstrate skills

[We will discuss syllabus next class.]

Announcements ↴