

Administrivia

Geometric Algorithms

Lecture 0

CAS CS 132

What is this course?

linear algebra for computer science

linear algebra with a data science bent

linear algebra + numpy, scipy, etc.

preparation for ML, data science, graphics,...

not geometric algorithms in the traditional sense

see course schedule for full details

Why are we doing this?

geometric thinking is fundamental

>> nearest neighbors

>> separating hyperplanes

linear algebra is fundamental

>> PageRank

>> SVD

>> neural networks, support vector machines, convolution

(this is what we signed up for)

How is this course run?

material is on the course website

discussion + announcements are on Piazza

submission + grading is on Gradescope

homework is released Thursday, due following **Thursday at 2PM**

slides are released before lecture

sections are for reviewing homework solutions and course material (more info during your first section)

What's the workload?

(it's a fair amount, but hopefully still fair)

2 lectures/week

1 section/week

1 assignment/week (12 total, graded on top 10)

1 midterm

1 final

1 Google form/week

How are we graded?

50% assignments

20% midterms

25% final

05% participation

What is participation?

I don't take attendance

you'll report your attendance in the weekly Google form

it's strongly advised you come to class

it's an easy way to get some points if you're struggling with the material

Anything to say about academic dishonesty?

don't do it

don't ask for or give solutions in any scenario

answer receiver and answer giver are equally culpable

cite your sources (see course guidelines page)

remember: you can drop assignments, and you will have to do this stuff on exams

we take this seriously

What if I'm stuck on a homework problem?

1. ask a question on Piazza
 - >> more general questions are better
 - >> "where should I start" as a last resort
2. go to office hours
3. send me an email if you're struggling

Anything else?

please contact me as soon as possible if you need disability accommodations

read and understand all course and university guidelines

don't hesitate to suggest how to make this course better

Statistics

240 students (120/section)

8 sections (Mondays)

13 course staff members (me, 2 TFs, 2 TAs, 8 CAs)

25 hrs/week office hours

Lastly...

we are human

it's important to meet people where they are

we are here to help you succeed

we take this seriously

(also, I'm sure I missed something. Ask questions!)