Administrivia

Geometric Algorithms Lecture 0

linear algebra for computer science

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linear algebra with a data science bent

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linear algebra + numpy, scipy, etc.
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see course schedule for full details

Why are we doing this?

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geometric thinking is fundamental:

- » nearest neighbors
- » separating hyperplanes

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linear algebra is fundamental:

- » PageRank
- » Singular Value Decomposition (SVD)
- >> neural networks, support vector machines, convolution

How is this course run?

```
material is on the course website
discussion + announcements are on Piazza
submission + grading is on Gradescope
```

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- » Barring technical issues, lectures will be recorded

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If you're on Windows, I generally recommend installing a WSL environment

What's the workload?

```
(it's a fair amount, but hopefully still fair)
 lectures / week
  discussion section / week
   assignment (written) / week
   lab / 2 weeks
   quiz / 2 weeks
   exams (midterm, final)
```

How are we graded?

```
Assignments (12 total, 2 dropped)
     Labs (6 total, 1 dropped)
     Quizzes (6 total, 2 dropped)
25%
     Midterm Exam (October 21 during class)
20%
      Final Exam (Date TBD, Cumulative)
```

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- » We will automatically drop your lowest 2 assignment scores

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- >> They will consist of a small collection of written questions similar to homework assignments
- » We'll drop your two lowest quiz scores, but you
 must take the quiz in order for it to be dropped

Anything else?

This is just an outline of the course. You must read the entire course manual

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

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

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That said, use your best judgment. Don't abuse this privilege

Generative AI is great for studying, but you can't use it for quizzes and exams

We are human

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We are here to help you succeed, we take this seriously

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I'm sure I missed something. Ask questions on Piazza!

!!READ THE COURSE MANUAL!!