Overview of Intro to Robotics, Fall 2020

what a mess

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Today's class

- All about Zoom
- Class going forward
  - Homeworks, grading, exams, etc.
- Topics so far
- Topics yet to come

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Zooooooom

- I would **appreciate** but do not **require** video
  - It really does help me though
- You can "raise hands"
- You'll come in muted but can unmute yourself
- **Please do talk!**
- The client (free) has more features
  - zoom.us/download
- Let's test today

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Today we will test

- Raise hand
- Say something
- Chat something
- Try video
  - Find a background you like, it's fun
- Watch slides
- Trouble?

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Lectures

- The classroom will flip
  - *Lectures* will be offline
  - I plan to post lectures a week in advance
  - You should watch lectures **before class**
- There may be links to additional content
  - These will be a required part of lecture
- 1-2 hours of content per lecture (total)
- For every lecture, we'll have a Q&A Piazza post
  - This will be part of your grade

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During class time

- During class, we'll do questions and exercises
- This is basically now a seminar
- That only works if:
  1. You come to class;
  2. with questions, answers, and thoughts;
  3. prepared to engage.
- Participation will also be part of your grade

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Grading

- Weekly quizzes
  - On Blackboard
  - Due 11:59 pm Sundays
  - 5-30 minutes
  - 50% for turning it in
  - Still curved
- No exams
- No homeworks
- No projects ☹ ☹

%age of remaining grade*	
Class participation	40%
Piazza participation	40%
Quizzes	40%

** These numbers are accurate: you can get a perfect grade by earning 5/6 of the remaining points. This is intended to give you some latitude in figuring out where to put your effort and help you deal with any constraints.*

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Class so far

- Mobility
  - Legs and feet
  - Standing and walking
  - Gaits
- All about sensors
  - Characterizing
  - Vision
  - Depth
  - Features
- Uncertainty
- DC motors
  - The hall effect
- Manipulations
  - All about grippers
  - Gripper kinematics
- Kinematic chains

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Class from here

- Kinematics
- Mapping
- Localization
- SLAM
- Human-robot interaction
- Robot ethics
- Knowledge representations
- …

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