

Computational Geometry

(3250)

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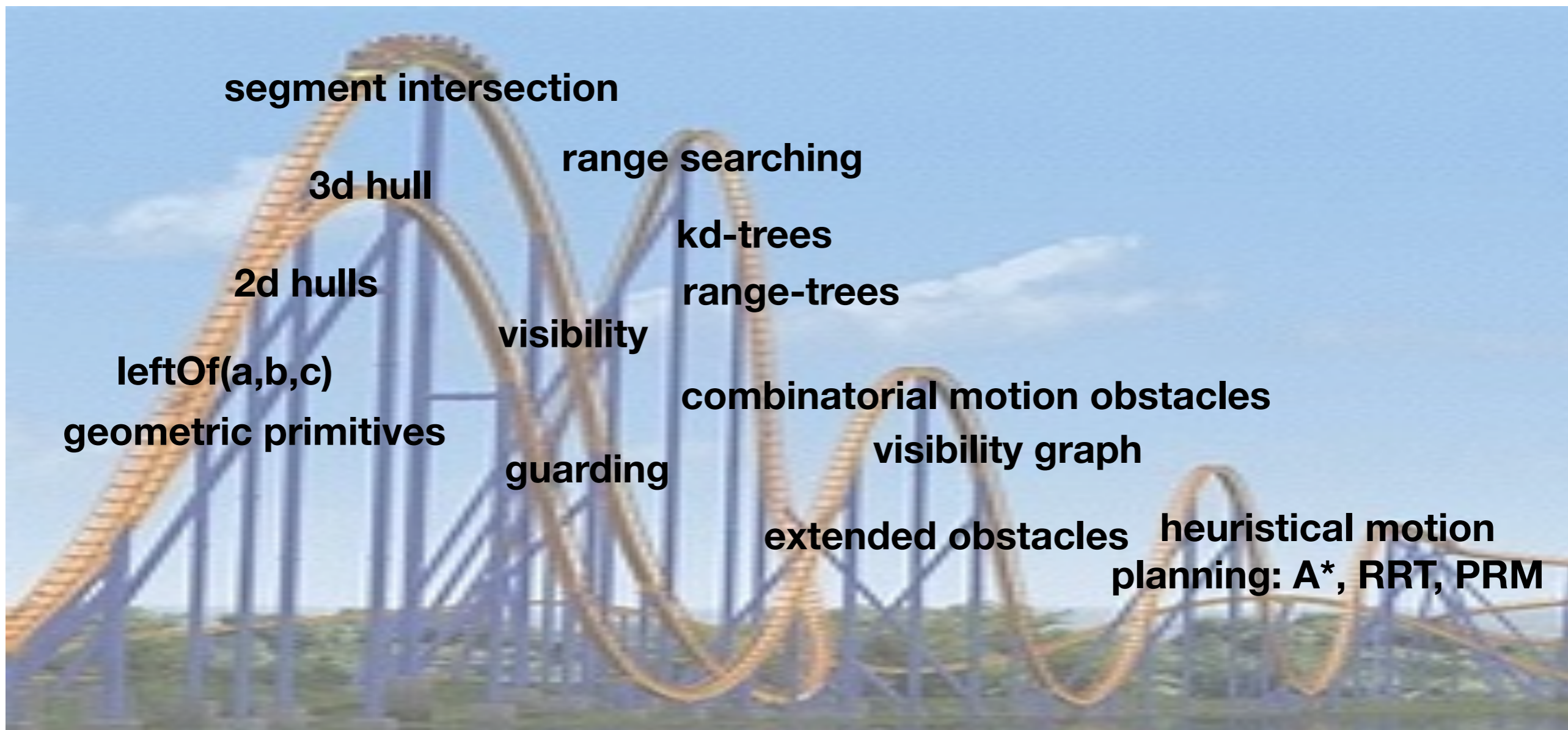
Announcements

- Final demo
 - Official slot: Saturday May 19th 2pm, Searles 126
 - I'll be available Friday May 18 and Thursday May17
 - put your name on the signup sheets

Announcements

- Course feedback is open
 - Fill it out
 - Your input will help me make the class better
- Assignments were paced
 - difficulty: easy \longrightarrow hard
 - pace: slow \longrightarrow faster
 - skeleton code provided more \longrightarrow less \longrightarrow none
- **Question for you:** What can I do so that classes are more effective?
 - Lecture only: partially useful
 - Classwork: Hard to stay focused, and depends on group dynamics

It's been a fun ride!



segment intersection

3d hull

2d hulls

leftOf(a,b,c)

geometric primitives

range searching

kd-trees

range-trees

visibility

combinatorial motion obstacles

visibility graph

guarding

extended obstacles

**heuristical motion
planning: A*, RRT, PRM**

What have we learned?

- Some fundamental design techniques
 - divide-and-conquer, line sweep, incremental
- Some fundamental problems
 - convex hulls
 - segment intersection
 - range searching
 - visibility
 - motion planning
- Lots of fun labs!



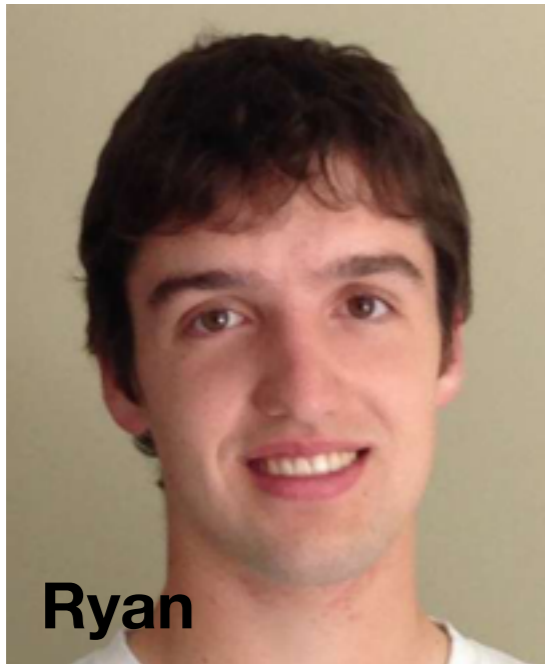


Ezra

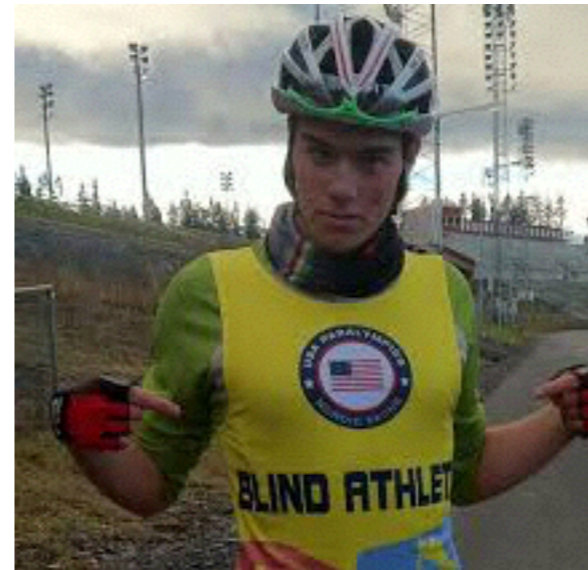


Duncan

THANKS to the fantastic TAs!



Ryan



Jake



If you liked it, take more theory-ish classes

- Computational game theory (Mohammad Irfan)
- Algorithms for GIS (Laura)
- Will be offered in 2019-2020

