Update

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Outline

Algorithms

- Split the problem in two stages:
  1. Find maximal disks at each timestamp (MaximalFinder) and
  2. Join maximal disks between adjancent timestamps (FlockFinder)
- Pseudocode for both algorithms available online: MaximalFinder[1] and FlockFinder[2].

[1] `https://tinyurl.com/y74lld5k`
[2] `https://tinyurl.com/yac26guf`

Maximal finder overall steps

1. Indexing points...
2. Getting pairs...
3. Computing centers...
4. Indexing centers...
5. Getting disks...
6. Filtering disks $< \mu$...
7. Prunning duplicate candidates...
8. Indexing candidates...
9. Getting expansions...
10. Finding maximal disks...

Flock finder

1. Set of disks for t_i...$Setofdisksfort_i + delta$...
2. Joining timestams
3. Checking internal timestamps

Outline

Performance

1. Show performance analysis by steps
2. Highlight the bottlenecks

Outline

Proposal

1. Alternatives in Simba
2. Grid indexing