

PFLOCK Report

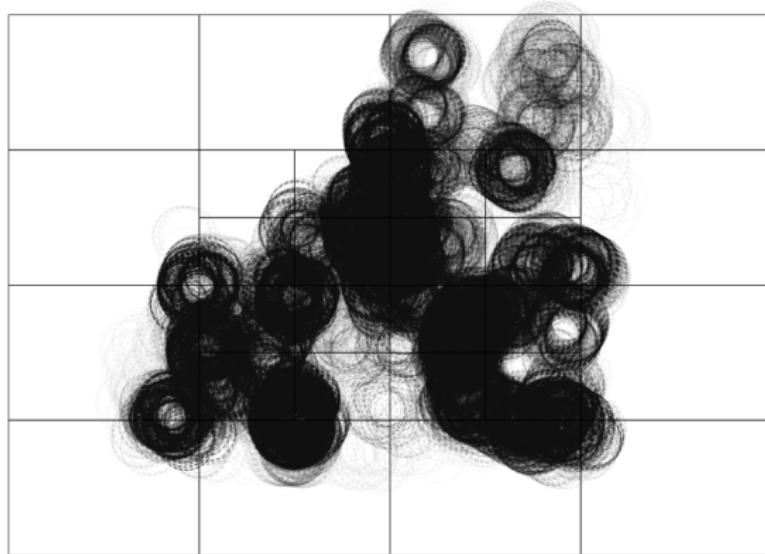
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Candidate pruning bottleneck...

We have to deal with +188K candidates...



Candidate pruning bottleneck...

$\varepsilon = 20$ and $\mu = 3$

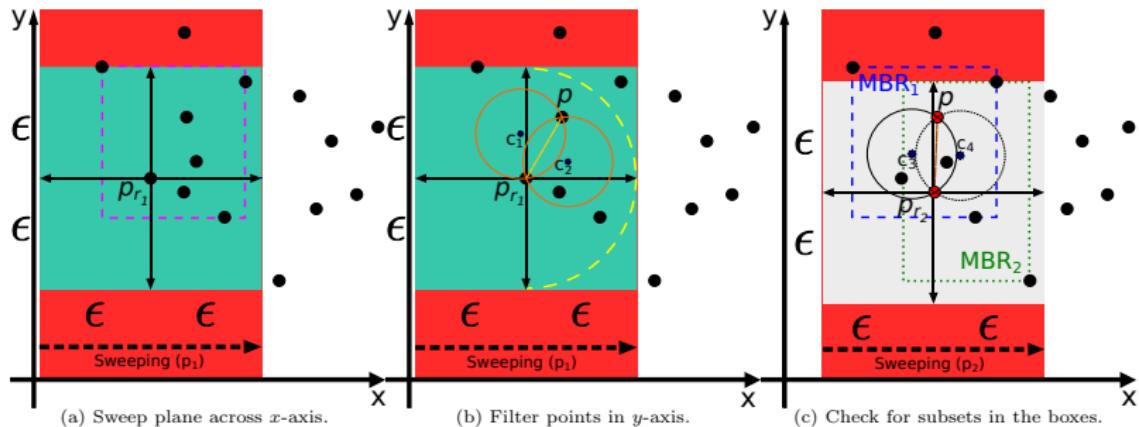
Cell	Number candidates	Tree size	Range size	Position
0	10393	258	170	77
1	9579	231	167	84
2	11994	276	166	78
3	10765	251	170	87
4	7974	204	123	64
5	7936	188	126	61

Indeed...

- ▶ Average size of maximal disks hold in the tree: 25.88
- ▶ Average size of candidate disks query to the tree: 17.70

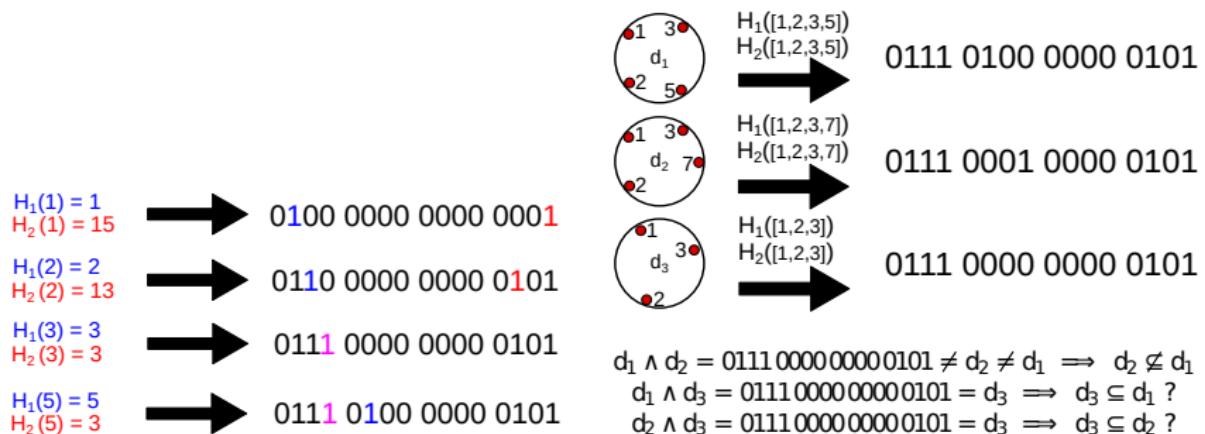
Currently working on PSB → PSI...

Plane sweeping [80%]



Currently working on PSB → PSI...

Binary signature [50%]



Alternative trajectory datasets...

ny_bikes [Citi Bike NY]



Trajectories: 2'734.157 Time span: March 2023

Alternative trajectory datasets...

ny_taxis [TLC Trip Record Data]



Trajectories: 14'336.486 Time span: October 2013

What's next?

- ▶ Complete implementation for PSB (plane sweeping and binary signatures)...
- ▶ Run interpolation for new datasets...
- ▶ Start working on temporal dimension...
 - ▶ Explore 3D partitioners...