

CGAL question

Data structure for a point cloud

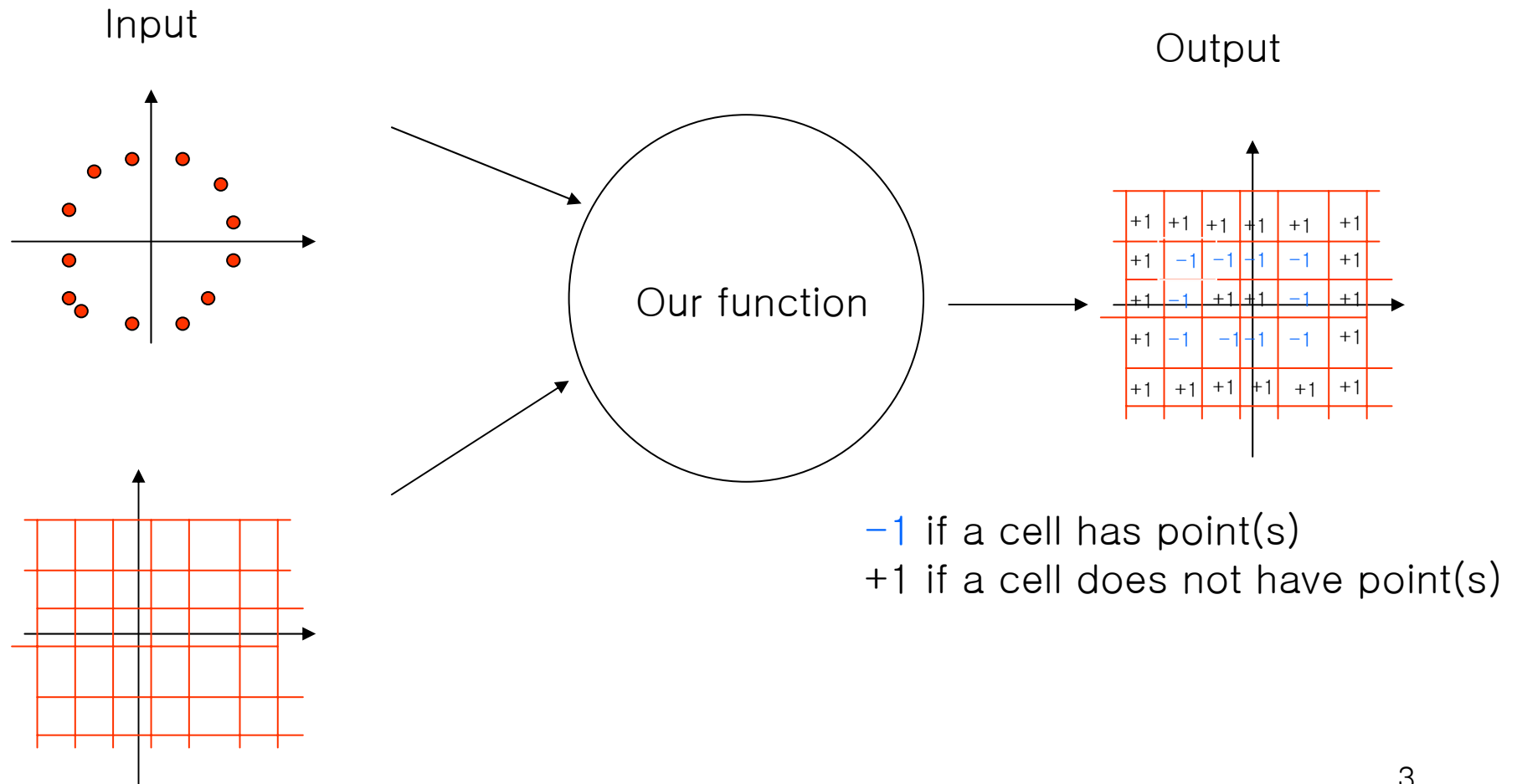
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Problem statement

- Input
 - unordered 3D point cloud (scanned)
 - 3D grid (user defined)
- Output
 - Set -1 for a cell of grid if the cell contains at least one point
 - Set $+1$ for a cell of grid if the cell does not contain any points

Example (with 2D case for explanation)



Questions?

- Data structure for point cloud?
 - Which class in CGAL?
- Data structure for a 3D grid?
 - Which class in CGAL?
- Note: A K-d tree is being used.