## DBSCAN: Definitions and Algorithm Outline

- $\epsilon$ -neighbourhood of  $\mathbf{x} = \text{set of points } \mathbf{x}_i \text{ such that } d(\mathbf{x}, \mathbf{x}_i) \leq \epsilon$
- $\bullet$   $\mathbf{x}=$  core point if its  $\epsilon$ -neighbourhood contains at least  $n_{min} \neq$  points
- $\bullet$   $\mathbf{x}_i$  in the  $\epsilon$ -neighbourhood of core point  $\mathbf{x}$  is directly reachable from  $\mathbf{x}$
- $x_n$  is reachable from  $x_1$  if there is a path  $x_1 \to x_2 \to \cdots \to x_n$  where  $x_{i+1}$  is directly reachable from  $x_i \to \text{non-reachable points}$  are outliers

