

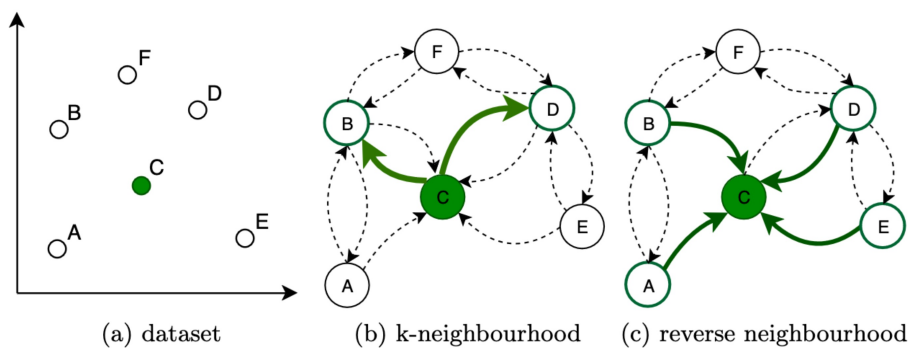
Class Representatives Selection in Non-Metric Spaces for Nearest Prototype Classification

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<https://github.com/jaroslavh/ceres>

Class Representatives Selection (CRS):

- novel method for prototype selection in large datasets
- enables efficient nearest neighbor classification
- requires **only** pairwise similarity to be defined



Two stage algorithm:

- build reverse K-neighbourhood graph using the NN-descent algorithm
- greedily cover the graph nodes until a coverage criteria is met

Classification speed/accuracy tradeoff can be used to get the best possible results in a given number of similarity computation.

- Motivated and tested on network device classification in real computer networks

