

# STRUCTURE DESCRIPTION AND MATCHING

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Structure description and matching are techniques of high point of interest. This paper presents a specific method developed to describe and match particular type of structures. The method incorporates the derivation of the structure description suitable for further structure matching. A *structure* in the context of this work is an abstract structure (set of points) derived as a representation of a physical object. Discriminative ability of the presented approach is evaluated and discussed. Some details of the implementation in MATLAB are presented as well.

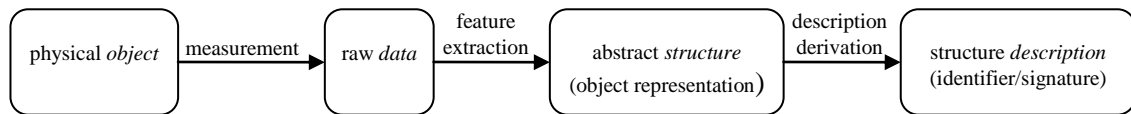


Figure 1. Process of building the *structure* and its *description*.

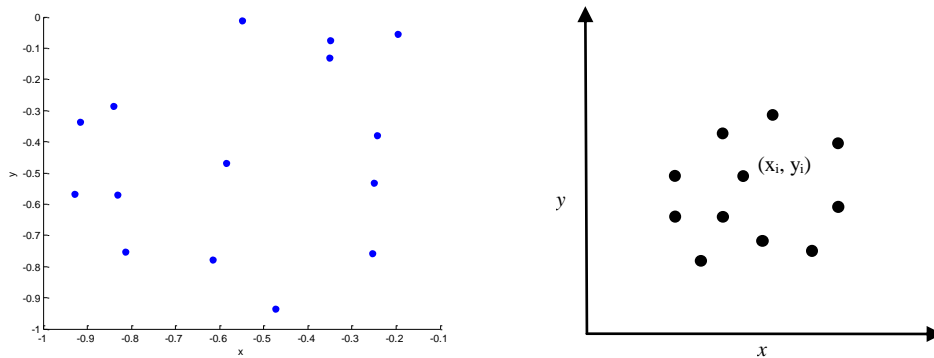


Figure 2. “Raw data”, simulation of the measurement of the physical object (left). The *abstract structure* - set of points (set of pairs of coordinates  $x$  and  $y$ ) as the physical object representation (right).

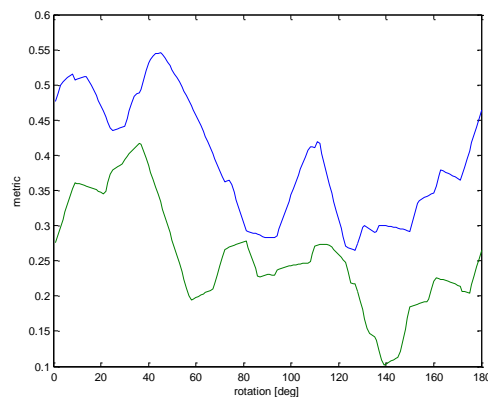


Figure 3. Metric(s) derived from the abstract structure to form the *structure description*.