

Finding structure in grouped data by kernel smoothing.

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Kernel smoothing provides a simple way of finding structure in data sets without imposing any parametric model. Because of that, during the last decades it has received attention from researchers of many areas, since it brings flexibility to handle real life data sets. An implicit assumption (of which we are rarely aware) is that we consider the measurement error of the data as negligible, so that we deal with the sample as continuous data. However, there are real cases in which the measurement error can be considerable, insomuch that data is contained in just a few intervals; i.e., the sample becomes a grouped data set. In this talk we will consider how to find structure in grouped data by means of kernel smoothing. We will see how far we can go by using standard (bandwidth selection) procedures and what modifications could be made to improve the detection of structure in this very particular type of data sets.