

NONPARAMETRIC REGRESSION
WITH CORRELATED ERRORS

by

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Abstract

Nonparametric regression techniques are often sensitive to the presence of correlation in the errors. The practical consequences of this sensitivity are explained, with particular emphasis on smoothing parameter selection. We review the existing literature in kernel regression, smoothing splines, wavelet regression, both for short-range and long-range dependence. Extensions to random design, higher dimensional models and adaptive estimation are discussed.