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| **CONFIDENCE INTERAVAL ESTIMATION OF MONOTONE NONPARAMETRIC REGRESSION AND ITS APPLICATION ON AIR POLLUTION OF BAGHDAD CITY** | Thesis Title  |
| 2012 | Year |
| **Monotonic regression is one type of isotone property a nonparametric method designed for application in which the expected value of a response variable increases or decreases in relation to one or more explanatory variables several variations of monotone nonparametric regression have been developed over the past 40 years. One approach is to first apply nonparametric regression to data estimation of a response variable as a function of two continuous predictor variables is considered and then monotone smooth the initial estimates to ًiron out ً violations to the assumed order. Here, such estimators are considered, where local polynomial regression is first used, followed either by monotone method using simple averages( SAT) or a least squares isotonic regression (LSIR) by using the pool –adjacent – violators (PAV) and we use bootstrap and jack knife procedures and compare by this methods through Monte Carlo simulation using mean – squared error(MSE) . The primary focus of this work is to estimate different types of confidence intervals for these monotone nonparametric regression estimators most of the confidence interval use local polynomial regression and resampling methods bootstrap and jack knife procedures and suggested methods and combine between this methods, these methods are then applied for a real data in air pollution field for Baghdad city.**  |  Abstract  |