

ABSTRAK

Riset ini membahas masalah multikolinieritas pada model regresi linier. *Variance inflation factors* (VIF) digunakan untuk mengatasi masalah tersebut. Di sini, metode yang digunakan *ridge regression* (RR) dan *principal component regression* (PCR), dimana RR digunakan untuk memperkecil variansi estimator koefisien regresi, sedangkan PCR digunakan untuk mereduksi variabel-variabel multivariat. Hasil penelitian menunjukkan bahwa nilai R^2 model regresi melalui RR dan PCR sama-sama mendekati 1, yaitu 93,42% dan 92,7%. Hal ini berarti kedua metode tersebut signifikan.

Kata Kunci: model regresi linier, multikolinieritas, *principal component regression*, *ridge regression*.



ABSTRACT

This research discussed about multicollinearity problem on linear regression model. The variance inflation factors (VIF) is used for this problems . Here, we used ridge regression (RR) and principal component regression (PCR), where RR is used to minimize the coefficient regression of estimator variance and PCR is used to reduce the multivariate variables. The result showed that the value of R^2 for both model, RR and PCR are close 1, they are 93,42% and 92,7% . It means that of both methods are significant.

Keywords: *linear regression model, multicollinearity, principal component regression, ridge regression*

