Investigation of the solution of least squares problems using the QR factorization

KIKOMEKO MUSA 15/U/6675/PS

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1 METHODOLOGY

Among the methods includes the following:the normal equationa.

Given data $((x1; y1).....(xN; yN))$**, we may define the error associated to saying y = ax + b.**

This is just N times the variance of the data set and It makes no difference whether or not we study the variance or N times the variance as our error, and note that the error is a function of two variables.

The goal is to find values of a and b that minimize the error.We will describe how to factor a general m n matrix A, with m n,A = QR.

$$a^2y - (ax + b) = 1/N \sum_{N}^{n=1})(yn(axn + b^2)). \quad (1)$$

2 REFERENCES

American Congress on Surveying and Mapping, author = American Congress on Surveying and Mapping, title = Issue of surveying and Land Information System, date = June, 2001,