

**NUMERICAL COMPARISON BETWEEN CLASSICAL
CONJUGATE GRADIENT AND MODIFIED CONJUGATE
GRADIENT**

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DECLARATION

I certify this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with standard referring practices of the discipline.



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ABSTRACT

Conjugate Gradient (CG) are widely used in solving unconstrained optimization due to global convergence properties. The CG that used to solve unconstrained optimization have gone various improvement and modification until now. So a lot of effort have done to improve the efficiency of the classical method. In this research, three known classical CG method and three modified CG method are tasted with four different problems and difference initial points. The modified CG method are known to have better performance than the classical CG method. The method are tasted based on the number of iteration and the CPU time.