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AUGMENTED LAGRANGIAN METHOD FOR SOLVING CONVEX QUADRATIC FUZZY PROGRAMMING PROBLEMS

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Abstract. In this paper, we suggested an algorithm based on a method of multipliers to solve convex quadratic fuzzy optimization problems. We discuss the quadratic penalty and prove that if the Lagrangian function corresponding to the main problem is convex (strict convex), then the Hessian matrix of the augmented Lagrangian function is positive semidenite (positive denite). We prove the efficiency of the algorithm, illustrating numerical examples.

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