

This technical note proposes an active set method based on nonnegative least squares (NNLS) to solve strictly convex quadratic programming (QP) problems, such as those that arise in Model Predictive Control (MPC). The main idea is to rephrase the QP problem as a Least Distance Problem (LDP) that is solved via a NNLS reformulation. While the method is rather general for solving strictly convex QP's subject to linear inequality constraints, it is particularly useful for embedded MPC because (i) is very fast, compared to other existing state-of-the-art QP algorithms, (ii) is very simple to code, requiring only basic arithmetic operations for computing LDL^T decompositions recursively to solve linear systems of equations, (iii) contrary to iterative methods, provides the solution or recognizes infeasibility in a finite number of steps.