

# Interior-point line search methods for linearly constrained optimization\*

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## Abstract

Interior methods have gained renewed interest in nonlinear programming in the last decades. Some state-of-the-art methods for nonlinear optimization use interior-point methods as their main strategy. On the other hand, linearly constrained minimization has many applications in a variety of areas, and methods that exploit its peculiarities tend to perform better than other softwares for general nonlinear programming problems. In this work, we will present a feasible interior-point line search approach for linearly constrained optimization problems. We will focus on the implementation challenges of such a method, conceived for large scale problems.

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