MA635P-Scientific Programming Laboratory

Krylov Subspace: BiConjugate Gradient Method and KKT condition

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Team

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Work

Social Network Matrix

1. Understand what is KKT Conditions: Reference and Reference 2

MINRES

1. Generate a linear solve package for BICGSTAB using Python
2. Use the following reference
   https://people.inf.ethz.ch/arbenz/ewp/Lnotes/chapter10.pdf
3. Use the above developed methods to compute the solution of the KKT Matrix

Tasks

1. Construct a KKT matrix Reference
2. Use python program and BICGSTAB method to compute solution

Deliverable

1. Python notebook (Google colab)
2. Report, Latex Presentation and video presentation, each one has to explain 3 minutes about their contribution and how did you develop the code, data etc.

Thanks

Doubts and Suggestions

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