Distributed computation of linear algebra operations

Distributed systems and networks laboratory

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Overview of distributed systems and networks

Importance of distributed computation in solving large-scale problems

Motivation for using Python and the Ray library

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Explanation of common linear algebra operations

Challenges in performing these operations on large datasets


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Overview of the Ray library and its capabilities

Key features and advantages of using Ray for distributed computation

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List of operation

We will showcase the following operations:

- Product
- Determinant
- Inverse
- Rank

The Matrix and RayMatrix classes

The Matrix class

The RayMatrix class