

Management in Intelligent Systems

University Gustave Eiffel

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Project : reliability

For the project, you can make groups of maximum two people.

Get the article *Network Reliability and Resilience of Rapid Transit Systems*.

For a pair of node origin-destination, $P(ei)$ is the probability that it is the ei link that is not "cut" among all those that make up the paths from origin to destination.

Using the article, for the adjacency matrix provided :

1. Create a *Rod* function that compute the reliability for all pairs of origin-destination nodes.
2. Create a *Rnode* function that compute the nodal reliability.
3. Create a *Rrange* function that compute the range between the maximum and minimum reliability.
4. Create a *Rsys* function that compute the average reliability.
5. Save the result from each function in a file *reliability.mat*
6. Discuss the relevance of this indicator.

Put the functions and the file in an archive *Reliability_Namefirstperson_Namesecondperson.zip* and send it to adrien.minet@ifsttar.fr and neila.bhouri@univ-eiffel.fr with the object *Project : Reliability Namefirstperson Namesecondperson* and the other person who work on it in copy.