

Masters Thesis Topic

Optimizing Container Barge Stowage Plans



Topic overview:

Loading containers onto ships and barges is not so simple as it may seem. Placing too many containers on one side of the barge, for example, risks capsizing it. Finding the correct distribution of containers across the deck of the barge to ensure the stability of the vessel is a difficult problem.

A further challenge is avoiding containers from blocking each other, or *overstowing*, since a barge might visit multiple terminals/

ports and have several different origin-destination (OD) pairs.

Your task is to work with a small company in northern Germany (relocation not required) to model the container barge stowage planning problem mathematically and devise a solution approach for providing decision support.

For more information, contact:

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Note: This masters thesis topic may be written in German or English!