

## **Project Proposal**

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**1. Optimization problems in the vehicle route network design:** *The project aims at tackling the problem of inefficient vehicle sharing systems currently present in public transport domain and mobility on demand systems by suggesting changes in the way route planning and ride combining for sharing based systems is done while assuring optimization in several other domains. The problem will be tackled in a three phase approach - problem modelling in terms of graph, application of graph algorithms to get desired solution, optimization of different domains on obtained solution.*

**2. Sudoku integer linear programming solver:** *A linear programming solution to sudoku with GUI.*