Flow Models with Maximum Excess and Least Loss

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Abstract

Various types of large scale disasters are increasing and mass mobility towards the metropolitan urban cities are rapid. Under these conditions, a smooth traffic management in usual life and shifting of people to the desired destinations in a systematic and optimal way is a challenging problem. In general, a large number of existing region and content specific models which seek to address these issues are still not universally adequate. In this talk, we discuss few of the models, where storage of excess flow is permitted and given network is allowed to be redirected. The designed algorithms are from the prospective of flow improvement with minimum loss on flow values and minimum evacuation time increment.

Keywords: Evacuation planning; Flow models; Efficient algorithms; Network reconfiguration.

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