Summary: This work contributes to the wide research area of visualization of hierarchical graphs. We present a new polynomial-time heuristic which can be integrated into the Sugiyama method for drawing hierarchical graphs. Our heuristic, which we call Promote Layering (PL), is applied to the output of the layering phase of the Sugiyama method. PL is a simple and easy to implement algorithm which decreases the number of so-called dummy (or virtual) nodes in a layered directed acyclic graph. In particular, we propose applying PL after the longest-path layering algorithm and we present an extensive empirical evaluation of this layering technique.

MSC:
90C35 Programming involving graphs or networks

Keywords:
Graph drawing; Layered directed acyclic graph; Layering algorithm

Software:
LEDA

Full Text: DOI

References:


This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.