Marriott, Kim; **Stuckey, Peter J.**

NP-completeness of minimal width unordered tree layout. (English) Zbl 1088.68070

J. Graph Algorithms Appl. 8, No. 3, 295-312 (2004).

Summary: Tree layout has received considerable attention because of its practical importance. Arguably the most common drawing convention is the (ordered) layered tree convention for rooted trees in which the layout is required to preserve the relative order of a node's children. However, in some applications preserving the ordering of children is not important, and considerably more compact layout can be achieved if this requirement is dropped. Here we introduce the unordered layered tree drawing convention for binary rooted trees and show that determining a minimal width drawing for this convention is NP-complete.

MSC:

68Q17	Computational difficulty of problems (lower bounds, completeness, difficulty of approximation, etc.)	Cited in **1** Document
05C85	Graph algorithms (graph-theoretic aspects)	
68R10	Graph theory (including graph drawing) in computer science	

Keywords:

binary rooted trees

Full Text: DOI EuDML