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"A new Elimination Framework using Annotated Decomposition Trees."

In this talk a new framework for elimination-based data flow analysis is introduced.
A simple and a delayed elimination algorithm are presented that exhibit a worst-case
complexity of $O(n^2)$ and $\sim O(m)$, respectively. The algorithms use a new compact data
structure for representing reducible flow graphs called Annotated Decomposition
Trees. This data structure extends a binary tree to represent control flow graph
information, dominance relation of the flowgraph, and the topological order of
vertices. The construction of the annotated decomposition trees runs in $O(n + m)$.
Experiments were conducted with reducible flowgraphs of the SPEC2000 benchmark
suite.