Abstract

Graphical methods offer the structural icon of the system that facilitates testing the logical progress of the program. A control flow graph describes the sequence in which the instructions of a program will get executed. PDG represents a program as a graph where statements and predicate expressions can be characterized by the nodes. The System Dependence Graph (SDG) is an extension of the Program Dependence Graph (PDG) and represents a program that consists of multiple procedures and involves procedural calls. An assessment of flow graphs & dependence graphs can be performed on the basis of properties like control dependence, data dependence, transitive dependence, flow sensitivity, parameter passing etc.

References

Evaluation of Flow Graph and Dependence Graphs for Program Representation

- D. P. Mohapatra, R. Mall, and R. Kumar, "A node marking dynamic slicing

**Index Terms**

Computer Science  
Software Engineering

**Keywords**

Control flow graph  
program dependence graph  
system dependence graph