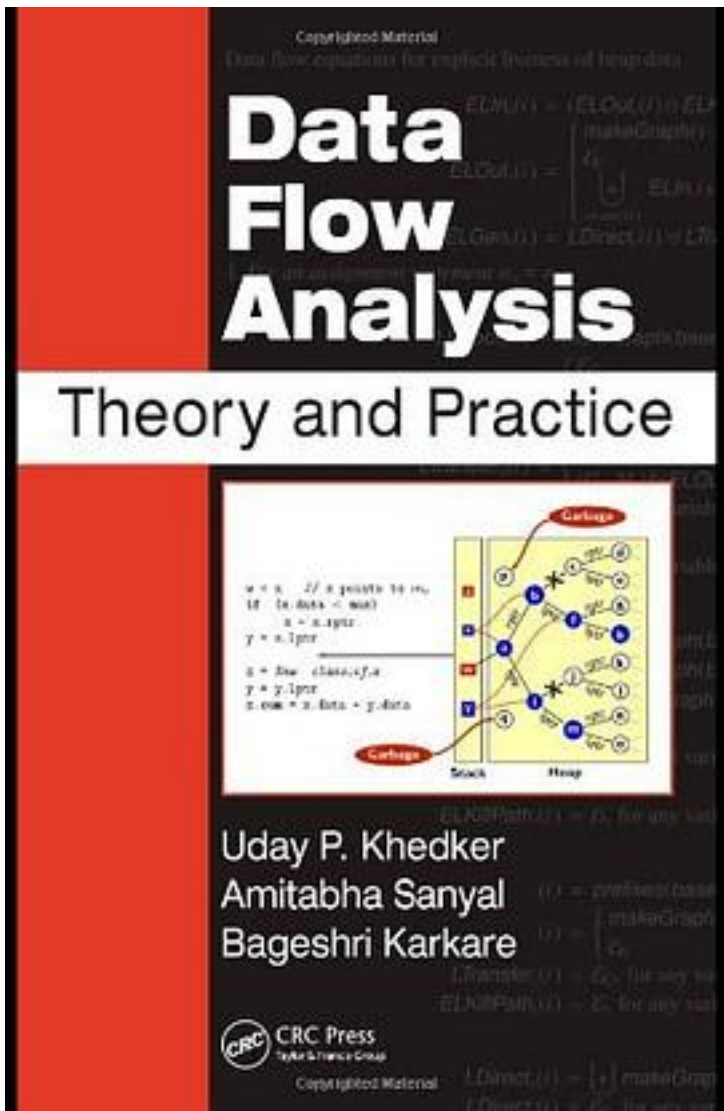


Data Flow Analysis



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著者:Uday Khedker

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This is an in-depth text that goes beyond bit vectors. This work provides an in-depth treatment of data flow analysis technique. Reviewing inter-procedural analysis and incremental flow analysis, this book is the first to extend detailed coverage of data flow analysis beyond bit vectors. Supplemented by numerous case studies and examples, this text equips readers with a combination of mutually supportive theory and practice. It examines mathematical functions and includes studies of data flow analysis implantations through use of the GNU Compiler Collection. Readers can experiment with the analyses described in the book by accessing the author's web page where they will find OPTEX (Optimization Explorer) software and source code.

作者介绍:

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标签

计算机

编译器

编译原理

Compiler

compiler

编译

编程

程序设计

评论

作为一本从实践中出发的专业类书籍，作者在实现GCC 4.0以上版本中数据流分析和优化算法的基础上，总结并撰写了此书。

优点:基于GCC的实践经验，值得参考

缺点：有关算法部分，伪代码，以及一些理论介绍方面，内容不连贯，个别非常突兀。所以，总体给四星。

从这本书里，学到了DFA的一些概念，迭代算法及其复杂度，分析和转换中的近似处理手段等等。

只能给三星。还行。作者的行文有问题，读起来很不通畅，连定义都给的很拗口。本书覆盖的面比较广，但很多细节我认为没有必要出现在课本里，而应该让学生读论文。纲领部分却又覆盖面不够，举例来说，全书的主题可以被Principles of Program Analysis的第一，二章覆盖，而后者只花了一百多页。不能说本书的细节都是废话，但我很怀疑这些细节对编译器工程师来说是有效的。基本上，要初步了解编译器就看Cooper的书，要看偏理论的就看Nielson，要搞工程就看论文和代码。这本书的定位比较尴尬。

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书评

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