

[an error
occurred
while
processing
this
directive]

本期目录 | 下期目录 | 过刊浏览 | 高级检索

[打印本页]

[关闭]

论文

计算面向对象程序切片技术研究

杜林 江海燕

山东教育学院计算机科学与技术系, 山东 济南 250013

摘要:

提出了把波动效应分析和系统依赖图结合起来进行切片的方法, 通过波动效应分析反映面向对象程序中单元间的波动关系, 基于系统依赖图切片侧重于分析控制依赖和数据依赖. 分析了面向对象程序中的波动效应, 扩展了粗粒度切片的含义, 并且把波动结果映射到切片中. 通过构造类图和改造传统系统依赖图来构造面向对象系统依赖图. 分别给出了波动效应分析、构造系统依赖图以及切片的算法实现, 并进行了复杂度分析.

关键词: 程序切片; 波动效应; 系统依赖图

A study of computing object-oriented program slicing technology

Department of Computer, Shandong Education University, Jinan 250013, China

Abstract:

A new object-oriented program slicing method was presented, which combines ripple effect analysis and system dependency graph. This method can be used to analyze the semantic relations in object-oriented program units by ripple effect analysis, and the control dependency and data dependency by use of system dependency graph. The ripple effect in an object-oriented program was studied. The coarse-grained signification was extended to a larger level and integrated slicing, and the ripple effect analysis through transforming results of ripple effect was extended to the sentence level. The object oriented program system dependency graph was constructed by the class graph and the modifying traditional system dependency graph. The algorithms for analyzing ripple effect, constructing system dependency graph and computing slicing were designed. In addition, the complexity degrees of the algorithms were discussed.

Keywords: program slice; ripple effect; system dependency graph

收稿日期 2007-12-23 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

本刊中的类似文章

扩展功能

本文信息

Supporting info

PDF(310KB)

[HTML全文]

([\\${article.html_WenJianDaXiao}](#)
KB)

参考文献[PDF]

参考文献

服务与反馈

把本文推荐给朋友

加入我的书架

加入引用管理器

引用本文

Email Alert

本文关键词相关文章

▶程序切片; 波动效应; 系统依赖图

本文作者相关文章

▶杜林

▶江海燕