



UNIVERSITAT  
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# Diseño y desarrollo de un fragmentador de programas para Java basado en el System Dependence Graph

Trabajo Fin de Máster

Máster Universitario en Ingeniería  
y Tecnología de Sistemas Software

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## **Abstract**

The abstract

## **Resumen**

El resumen

***Keywords***— Program Slicing, Java, System Dependence Graph

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# **1 Introduction**

Nowadays.

After all,

## **1.1 Program Slicing**

## **1.2 Definitions**

## **1.3 Goals**

# **2 Background**

## **2.1 CFG, PDG and SDG**

## **2.2 Slicing approaches of Object Oriented programs**

## **2.3 Slicing approaches of Java programs**

slicers with their differences table

## **3 The Java language and JavaParser (?)**

### **3.1 Declarations**

### **3.2 Statements**

### **3.3 Expressions**

## **4 Slicer**

### **4.1 Scope**

### **4.2 Design**

### **4.3 Implementation**

## **5 Tests/Performance (?)**

## **6 Conclusions**

## **7 Future work**

## References

- [1] Citation needed
- [2] Matthew Allen, Susan Horwitz. *Slicing Java Programs that Throw and Catch Exceptions*. 2003.
- [3] Mark D. Weiser. *Program Slices: Formal, Psychological, and Practical Investigations of an Automatic Program Abstraction Method*. 1979.
- [4] M. Weiser. *Program Slicing* 1981.