

Partial Evaluation of Lazy Functional Logic Programs

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Abstract. This paper abstracts the contents of a Ph.D. dissertation entitled "*Partial Evaluation of Lazy Functional Logic Programs*" which has been defended at the Technical University of Valencia, promoted by Prof. María Alpuente. Partial evaluation is an automatic program transformation technique that aims the specialization of programs, with regard to parts of their input, while preserving program semantics. Partial evaluation has been first applied to functional logic languages in [1] where it is shown that the correctness of the transformation is dependent of the narrowing strategy used by the specialization algorithm. This thesis studies how to solve the problems arisen when lazy narrowing (a valuable strategy for Functional Logic Programming) is used as the basic operational mechanism during the partial evaluation process. Also, we develop some methods that improve the efficiency of the specialization.

Keywords: Program Transformation, Partial Evaluation, Narrowing Strategies, Functional Logic Programming

References

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