

Equality Based Uniqueness Typing

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Abstract

We define a uniqueness type system for the core lambda calculus which, unlike *Clean*'s uniqueness system and the system we proposed in a previous paper [1], does not involve inequalities. We claim that this makes the type system sufficiently similar to the Hindley/Milner type system that standard type inference algorithms can be applied, and that it can easily be modified to incorporate modern extensions such as arbitrary rank types and generalized algebraic data types. We substantiate this claim by sketching out how such a system would be defined.

REFERENCES

- [1] De Vries, E., Plasmeijer, R., Abrahamson, D.: Uniqueness typing redefined. In: Proceedings of the 18th International Symposium on Implementation and Application of Functional Languages. (2006) To be published; online at <http://www.cs.tcd.ie/~devriese/pub>.

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