

Editorial

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The present issue is composed of three contributed articles.

In “A verified framework for higher-order uncurrying optimization,” Zaynah Dargaye and Xavier Leroy present transformations to curry and uncurry weakly typed lambda-terms. They formalize these transformations using the Coq proof assistant and base their proof on step-indexed logical relations.

In “A type-theoretic foundation of delimited continuations,” Zena Ariola, Hugo Herbelin and Amr Sabry present a translational account of delimited continuations to address the long-standing question about their logical content. They extend the lambda calculus with a control delimiter and a delimited-control operator and embed this extended lambda calculus in a calculus that, via the Curry-Howard isomorphism, corresponds to a variant of classical subtractive logic à la Tristan Crolard.

In “On typing delimited continuations: three new solutions to the printf problem,” Kenichi Asai revisits the type-indexed function commonly used to format strings in C. He shows how this function uses delimited continuations and how its type-dependent behaviour is achieved by making the answer type vary. Its direct-style counterpart therefore requires the full original type system for the delimited-control operators shift and reset.

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