

Extension of Simply Typed Lambda Calculus with Regular Types

The Lambda calculus is an abstract mathematical theory of computation invented by Alonzo Church, that forms the simplest and smallest Turing complete system. It is the basis of the modern functional programming paradigm. In this talk, we propose an extension of simply typed lambda calculus with regular types and study properties of the extended formalism. We also discuss unification (matching) problem over regularly typed lambda terms.