

Programmable Semantic Fragments: The Design and Implementation of *typy* (Extended Version)

Cyrus Omar Jonathan Aldrich

October 2016
CMU-ISR-16-112

School of Computer Science
Carnegie Mellon University
Pittsburgh, PA 15213

Abstract

This technical report serves to archive the extended version of the paper *Programmable Semantic Fragments: The Design and Implementation of typy*, which appears in the proceedings of the 15th International Conference on Generative Programming: Concepts & Experience (GPCE'16).

Keywords: metaprogramming, bidirectional typechecking, pattern matching, foreign function interfaces