Mads Tofte, 17 December 1991
Department of Computer Science (DIKU)
University of Copenhagen
Universitetsparken 1
DK 2100 Copenhagen Ø
Denmark
email: tofte@diku.dk

Tutorial on Standard ML

This is the manuscript for a tutorial preceding the Conference on Functional Programming and Computer Architecture, Cambridge, Massachusetts, August 1991.

The tutorial gives an overview of Standard ML with emphasis placed on the Modules part of the language.

The tutorial is meant to be faithful to the language definition [1], as regards syntax, semantics and terminology. Also, it is intended to be independent of any particular implementation. The example programs were implemented using Standard ML of New Jersey.

Lecture 1 gives an introduction to ML aimed at the reader who is familiar with some programming language but does not know ML. Both the Core Language and the Modules are covered by way of example.

Lecture 2 discusses the use of ML modules in the development of large programs. A useful methodology for programming with functors, signatures and structures is presented.

Lecture 3 assesses the modules system from the point of view of practical programming and gives a brief overview of the semantics of ML Modules.

The ML source programs to which the manuscript refers can be obtained electronically by sending mail to tofte@diku.dk.

[1] R. Milner, M. Tofte and R. Harper: "The Definition of Standard ML", MIT Press 1990.