

# Correctness of programming patterns on enumerators

Zsolt Borsi<sup>a</sup>

<sup>a</sup>Eötvös Loránd University, Faculty of Informatics  
bzsrb@inf.elte.hu

## Abstract

This paper deals with the notion of enumerator and the programming theorems over enumerators. A programming theorem is a pair of a problem and an algorithm pattern that describes the program that solves the given problem. Processing of a collection of elementary values can be achieved by processing the values one by one. In this paper, the operators used in order to enumerate the elements of a collection are defined. The correctness of programming theorems over enumerators are also investigated. A case study illustrates how the operators of enumerator are implemented when processing various iterated types.

*Keywords:* programming pattern, programming theorem, enumerator, verification