## Abstract

This thesis focuses on machine-free definition of polynomial functions. The main goal is to not only make the readers familiar with this definition, but also to introduce them to the other pivotal terms of this thesis. The other pivotal terms are: basic functions, function composition, recursive schemes a polynomial conditions. Throughout the thesis the readers will be introduced, among other things, to derivation of the most used polynomially bounded functions, like multiplication, addition, or other arithmetic functions.