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Thesis title

Master's Thesis

Adrian

Brno, Fall 2016

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Declaration

Hereby I declare that this paper is my original authorial work, which I have worked out on my own. All sources, references, and literature used or excerpted during elaboration of this work are properly cited and listed in complete reference to the due source.

Adrian

Advisor: John Smith

Acknowledgement

This is the acknowledgement for my thesis, which can span multiple paragraphs.

Abstract

This is the abstract of my thesis, which can span multiple paragraphs.

Keywords

keyword1, keyword2, …

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Intro

2 Chapter

2.1 Definition

2.1.1 Univariate polynomial

A univariate polynomial is a mathematical expression of the form

$$a_n x^n + a_{n-1} x^{n-1} + \ldots + a_1 x + a_0 \tag{2.1}$$

where the $a_n, a_{n-1}, \ldots, a_1, a_0$ are the coefficients of the polynomial and x is called an indeterminate or a variable. The highest $n \geq 0$ is called the degree of the polynomial (such n exists, since the set $\{i \mid f_i \neq 0\}$ is finite) and $a_n \neq 0$ is called the leading coefficient[1].

2.1.2 Roots of a univariate polynomial

Let R be a ring, $f = a_n x^n + a_{n-1} x^{n-1} + \ldots + a_1 x + a_0$ a polynomial of $R[x]$, $c \in R$. Then an element $a_n c^n + a_{n-1} c^{n-1} + \ldots + a_1 c + a_0$ is called a value of the polynomial and we denote it as $f(c)$.
Using this, we can create a polynomial function by mapping every element of R, x, to the result of a substitution $f(x) = a_n x^n + a_{n-1} x^{n-1} + \ldots + a_1 x + a_0$ [2].

Let f be a polynomial over R, $c \in R$. We say that c is a root of the polynomial f if $f(c) = 0$[1].

Bibliography

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A An appendix

Here you can insert the appendices of your thesis.