

# Note on the Elements of Differentiable Programming

## 1 Introduction

This note is based on the book *The Elements of Differentiable Programming* [1].

*Definition 1 (Differentiable programming):*

Differentiable programming is a programming paradigm in which complex computer programs (including those with control flows and data structures) can be differentiated end-to-end automatically, enabling gradient-based optimization of parameters in the program.

## Bibliography

[1] M. Blondel and V. Roulet, *The Elements of Differentiable Programming*, (2024)