

Multiplying Algebraic Decision Diagrams

Jhonatan S. Oliveira

Department of Computer Science

University of Regina

Regina, Canada

OLIVEIRA@CS.UREGINA.CA

Editor: CS807 - Advanced Architecture - Dr. Gerhard and Trevor Tomesh

Abstract

Memcomputing was recently proposed as an alternative to turing paradigma of computation. The difference here is that the computation and the storage is done within the same architecture. In order to achieve that, memcopmuters use memelements, which are two-terminal electronics components with resistive, capacitive, and inductive characteristics. Memcomputers are mathematically proved able to solve NP-hard problems from turing computers.

Keywords: Memcomputing, post-silicon copmuting

1. Introduction
2. Background
3. Multiplying Algebraic Decision Diagrams
4. Conclusions

References