Memristor based Implementation of Kernelized Ridge Regression

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Abstract

Resistive memory systems are a promising solution for low-power machine learning. THeir ability to perform calculations directly within memroy eliminates energy-intensive data movemennt. Memristors, a type of resistive memory, are particularly attractive due to their small size. We've developed a new training algorithm that uses simple components to achieve accurate neural network weights without complex calculations. This methos allows for faster training and higher speed compared to traditional approaches.

Contents

1 Literature Summary

1.1 Memristors

1.2 Memristors crossbar for neuromorphic computing

1.3 Ridge Regression

1.4 Kernels

2 Proposed Work

2.1 Architecture

2.2 Algorithm

2.3 Implementation Details

3 Results

3.1 Area

3.2 Latency

3.3 Energy

4 Conclusions