

Reconfigurable Computing

Tutorial 4 - LSTM Network (Exploration)

Philip Leong

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1 Introduction

In this lab we explore how to obtain the maximum speed in our LSTM implementation.

- Gain experience in exploring alternative implementations to accelerate LSTM.

2 Laboratory Questions

Your answers to this laboratory should be in the form of a simple report. For each question below, provide a listing of the changes to the original code as well as the speedup compared with the baseline design generated in the previous tutorial in your report.

2.1 (100%) Exploration

In this lab, you are invited to modify the C source code, introduce approximations etc in order to achieve the maximum speedup for the LSTM implementation. The only restriction is that the maximum percentage error for any output in the test is 20%.