
Project Proposal

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Abstract

Insert abstract.

1 Introduction

Include brief information on setting up the CNN problem.

1.1 Field-Programmable Gate Arrays

Include brief information on FPGAs.

2 Problem Definition

Set up the goals of the project.

3 Implementation

Brief overview of implementation.

3.1 TensorFlow on EC2

Information on TensorFlow implementation on EC2. Talk about CPU baseline. Talk about speed up using GPU and Hogwild!

3.2 Neural Networks on FPGAs

Information on implementing a neural network on FPGA

4 Proposed Analysis

Talk about analysis that we are targeting.

References

- [1] F. Niu, B. Recht, C. Ré, and S. J. Wright, “Hogwild!: A lock-free approach to parallelizing stochastic gradient descent.” arXiv:1106.5730v2, 2011.