

Machine Learning for Image Classification — Final Specification

Introduction

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Model Updates

For the final specification, use CUDA's implementation of BLAS (cuBLAS) for the matrix products. Then, provide a comprehensive summary of your best performance (not accuracy) results for the given problem specification.

Version	Processor	Accuracy (%)	Grind Rate (samples/s)	Training Time (s)	CPU Cores
GPU native	V100	97.52	354,787.09	7.046480	16
GPU cuBLAS	V100	97.49	514,504.00	4.859049	16
CPU native	Caslake	97.50	55,764.34	44.831516	16
CPU BLAS	Caslake	97.26	285,796.38	8.747486	16

Table 1: Fill out Table 1 with your best performance for the model problem. Be sure to only use the parameters specified above for these runs: learning rate $\alpha = 0.1$, batch size $nb = 500$, $epochs = 50$, using $50K$ training samples and $10K$ validations samples.

