Chapter 1

Summary

Chapter 2

Problem Statement

From the assignment we were given the following tasks

- Write a function that performs matrix matrix multiplication on arbitrary sized two-dimensional arrays.

- Make a separate implementation for each way the loops in the above function can be ordered and test which one is the fastest.

- Compare the result of our implementation to DGEMM(), a similar function in the BLAS library

- All the functions and the call to DGEMM() should be wrapped into a single library.

- Implement a blocked version of the matrix matrix multiplication function and identify the block size that gives the best performance in regards to L1 cache. This result should be compared to the timings for the library function.

- Compare different compiler settings to see how they affect the result.

Chapter 3

Description of Hardware and Software Used

- stuff from lscpu - compiler and libraries used. version numbers to

Theory

Chapter 4

Implementation

- write something about test scripts

Chapter 5

Results

Chapter 6

Conclusion

Bibliography

[1] T. MOESLUND, *Image and Video Processing*, Aalborg University, 2 ed., 2010.