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# Chapter 1

## Introduction

## Chapter 2

### Implementation of `Matmult.nat()`

# Chapter 3

## Function Permutations & compiler optimizations

## Chapter 4

# Performance Analysis

# Chapter 5

## Blocked version

*Write a blocked version of your matrix-matrix multiplication function, `matmult blk()`, e.g. optimizing for the L1 cache size. Does blocking improve the performance? It is necessary to experiment with the block size for a given set of  $m$ ,  $n$ , and  $k$ , in order to find an approximate optimum (this is a drawback of blocking). Can it be faster than the fastest non-blocked version? Do you think you can beat the compiler or a library supplied function?*

# Bibliography

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