

CMSC5743 Lab 03

General Matrix Multiply

1 Sample Code:

- Go to the `./Lab03-code/`
- Run `sh run_matmul.sh` in your terminal
- You can change many places in the code to get different runtime
 - `matmul()`
 - `matmul_ikj()`
 - `matmul_AT()`
 - `matmul_BT()`

2 Assignments:

Q1 Change the shape of matrix A, B mentioned in `matmul.cpp` to get the best performance of your code and write down your configuration

Q2 Learn the `im2col` from the **Useful Materials** Section to implement it from scratch using C++ to optimize convolution operation

- `Input_Feature_Map`: $4 \times 4 \times 3$
- `Kernel_Size`: 3×3
- `Num_Kernel`: 3

Useful Materials:

- [MATLAB im2col](#)
- [Making faster](#)
- [ConvNets in practice](#)

Tips: You should learn the code style from the sample code to build your project.