week-13

JX-Ma

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1 INTORDUCE

This week, I tried to calculate the flops of FFT. Firstly, I searched for methods to implement FFT convolution on GitHub, including Python implementation and C++implementation The FFT implemented in Python is a direct library call. I tried to debug the program, but couldn't find the specific code for implementing FFT. Writing in C++is very complex, so I roughly understood the DFT conversion process and how to use FFT optimization. Firstly, we tried 4 data points and calculated the number of floating-point operations, then extended it to 16 and n2. However, it is unclear how FFT is implemented in CUDNN, as FFT conversion involves multiple algorithms. In the papers I read this week, I implemented FFT convolution calculation myself and provided the formulas for calculating flops using their methods.