1.
   a. I would expect that the low performance comes from a lot of cache misses due the spread-out nature of iterating by columns not the rows on the lowest levels. To achieve more performance, I would move k to the outermost loop.

   b. I got 50 GFLOPS by moving the k loop to the outermost edge and adding a #pragma omp for schedule(auto) to the I loop.

   c. For my best performance run of 85.4 GFLOPS executed on a Lone Peak server. I used the kij permutation with the k loop unrolled and jammed by 3. I also place the #pragma omp for schedule(auto) to the I loop.

2. My best run was 10 GFLOPS on a lonepeak server. I was unable to reach to performance target as I could not find a method to loop unroll (and jamm) successfully. When I tried with each of the loops I got incorrect results. In order to get my result I use the ijk permutation with a #pragma omp for schedule(auto) on the I loop and to recude cache thrashing I added a variable r of type double before the k loop to accumulate the results and then do a final save to C at the end.

3. My best run was 5.1 GFLOPS on a kingspeak server.