Reflections

My favorite concurrent technology talked about in this course was the OpenMP API. I thought the OpenMP API was much easier to work with and straightforward (considering the subject matter!). In particular, the documentation was a bit better to sift through to find what I needed. I found the usage of pragmas particularly straightforward and clean. It allowed for easy parallelization and for locking necessary critical and private behaviors. I like that OpenMP is not only available for C as well. Overall, OpenMP seemed like it was a bit “higher level” than the other types of parallelization we talked about.

Concurrent software is not going away, and the necessity for it’s use will only be increased as we become more dependent on technology. I am particularly interested in how different concurrent approaches can help with harvesting useful knowledge from big data. I think we’ll see, in our time, a strong combination of big data, artificial intelligence, and concurrent systems. I think that the usage of concurrent systems in combination with big data will allow us to create more powerful AI. I’m finding that I’m more interested in data science and analytics as I further my education in computer science. I think the usage of concurrent systems in different fields such as data analytics, will and more than likely already has started changing how quickly statistics and useful information are being acquired. This class has given me practical experience, tools, and references for parallel and distributed systems. In the future, I would like to use concepts I have learned in this course to work in data science and big data, or work with embedded systems.