How to use Intel's mkl library on AMD systems

By default, the mkl library will pick a very unoptimal path on AMD processors, causing libraries like openblas to perform much better. However, if you set the appropriate environment variables, mkl will be forced to use the appropriate code path for amd cpus like Zen and Epyc.

The solution is to run `export MKL_DEBUG_CPU_TYPE=5` before running your script.

This was pointed out in a comment on this puget systems article

> Nice! I have recently seen some people recommending using MKL on AMD, with the MKL_DEBUG_CPU_TYPE environment variable set to 5, as in: `export MKL_DEBUG_CPU_TYPE=5` This overrides the CPU dispatching in MKL, and forces the AVX2 codepath (the one MKL naturally uses on Intel parts without AVX512), otherwise MKL chooses an unoptimized SSE path with abysmal performance. But with the AVX2 path, MKL performs very well on Zen2, usually even outperforming BLIS and OpenBLAS!

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